

THE MARINE RECORD.

DEVOTED TO COMMERCE, ENGINEERING AND SCIENCE.

VOL. VIII. NO. 21.

CLEVELAND, O., MAY 27, 1886.

\$2.00 PER ANNUM
SINGLE COPIES 5 CENTS

THE CITY OF CLEVELAND.

The magnificent steel passenger steamer, named in honor of Cleveland, met a grand and hearty welcome at the hands of our citizens when she steamed into port yesterday. Everything is comparative, and in order to show by appealing to the eye the great strides that steam navigation has made in this country during the last century, we lay before our readers a cut of Mr. John Fitch's first boat, letters patent for which he took out in 1786, and we place in contrast a finely executed cut of the City of Cleveland. We make the cut of Mr. Fitch's boat for the reason that it was referred to by Mayor George Gardner, in his color presentation speech, which was delivered in a happy manner, and responded to by Mr. David Carter on behalf of the Detroit & Cleveland Steam Navigation Company. The Fitch boat, as shown in the engraving, was driven by paddles, six on each side; as six came out of the water, six were entered, making a stroke of eleven feet for each revolution of the engine.

At 9:30 o'clock Wednesday morning the presentation of the handsome colors recently voted by the city council of Cleveland to the city's beautiful namesake took place, and at 10 o'clock she departed for Cleveland with a number of invited guests, including Mayor Gardner and a committee of the citizens of Cleveland delegated to present the colors.

As is well known, the Detroit Drydock Company are the builders of the steamer. She was designed by Mr. Frank E. Kirby, who was assisted in the work by Mr. Fred Ballen. They take a very laudable pride in their handiwork, and well they may, for the result of their work marks a step in steamboat architecture far in advance of anything previously attempted on the lakes. We have already published a technical description of the steamer, and the following brief description simply aims to indicate a few of the principal features: The hull is constructed of steel and is 285 feet long over all, beam is forty feet six inches inside and seventy-five feet over the guards. Her depth amidships is sixteen feet, sheer 6 feet forward and 3 feet aft. Everything about the main deck is constructed of wood. The height between decks, on an average, is nine and one-half feet. There are no houses on the sides forward of the middle gangway, and thus an immense space for deck load is furnished. No hatches are provided for loading in the hold. The forward end of this space is shut off by a house that contains an engine for the steam steerer and entrances leading to the crew's quarters and officers' staterooms below deck. Forward and aft of the wheels are the usual wash rooms, mess rooms, etc. After these and closed off by a partition are the cook's and waiters' quarters, and forward the kitchen and pantry. Below the main deck are the boilers.

From the social hall you ascend to the main saloon. This saloon is eighteen feet high to the ceiling, and is flanked by a double tier of state rooms, the first of the kind on the lakes. The main cabin is divided by the engine box into a forward and after cabin. A striking feature of the after part is a small dome that furnishes light for the after state rooms. Aft and forward of the engine box is a staircase that leads up to the gallery. From there access is had to the upper tier of state rooms. The fore and aft ends of the cabins are connected by passages on either side of the engine box. Light is furnished by six electric lamps suspended from the ceiling.

The Detroit Drydock Company, in the construction of the City of Cleveland, have added much to the reputation of the company, and have demonstrated that in building and fitting out a steel passenger steamer they have no superiors. Long may the stand of colors presented by the city of

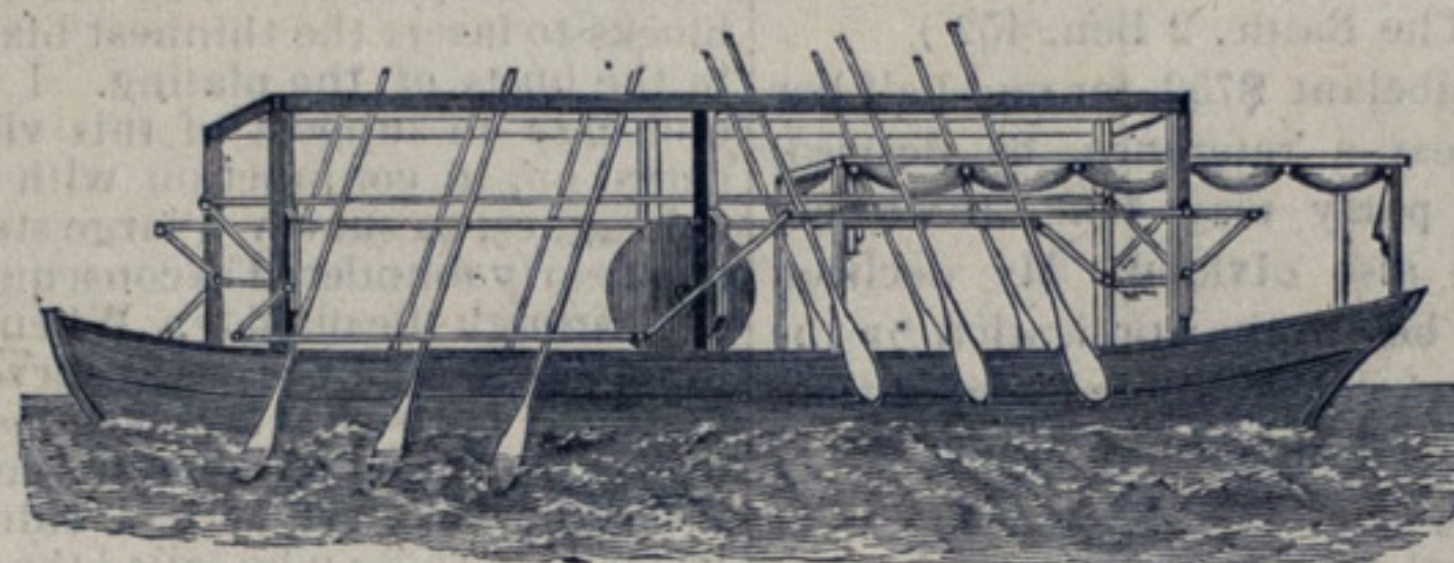
Cleveland to her beautiful namesake flutter in the breeze.

The engine, built by Messrs. Fletcher & Company, of New York, is a vertical jecondenser 66 inches diameter, 12 feet stroke of piston and calculated for working a steam pressure of 50 pounds to the square inch. On the trip down, as timed by Mr. S. Taylor, vice president of the North River Iron Works, the engine made 10,968 revolutions from dock to dock, the average being 293 1/2 per minute, and the highest number 32 revolutions, which were made while passing the City of Detroit, which boat had come out in the lake to meet the City of Cleveland, the Detroit at the same time turning up 20. It took the City of Cleveland two minutes and a half to pass her sister steamer.

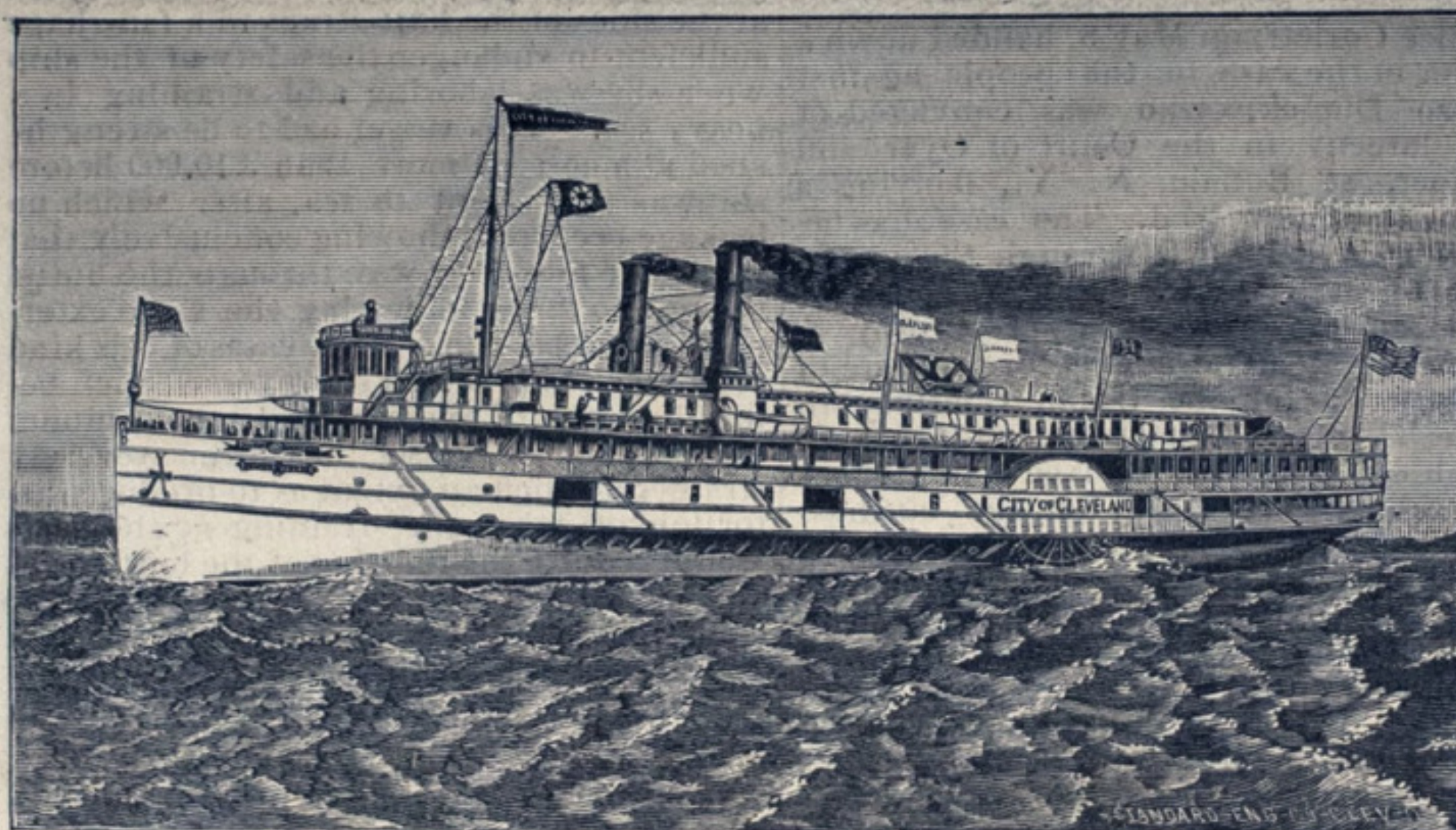
In reality of two plants, there being two engines, each driving its own dynamo. They are so arranged and connected that each can run its own circuit of lamps (200 lamps for the large and 150 for the small engine) or both, while both can never run the same circuit. The wiring was done by Mr. Phillips, of Cleveland.

The wrought iron forgings were made by the Cleveland City Forge & Iron Company and Superintendent Cole was aboard on the trip down and was well satisfied with the true working of everything.

The officers of the new boat are:
Captain, Dougal McLachlan.
Pilot, Archie McLachlan.
First engineer, James H. Reed.
Second engineer, John Sargent.



JOHN FITCH'S FIRST BOAT, 1786.



CITY OF CLEVELAND, 1886.

There are four boilers of the Scotch rotative tubular, twelve and one-half feet in diameter and eleven feet three inches long. Each has three round furnaces three feet three inches in diameter and eight feet in length. The boilers stand in two batteries near the outside of the hull, two of them facing each other with a common breeching and smoke pipe. Between these, running fore and aft, are the coal bunkers which have a capacity of 100 tons. Instead of the customary steam chimneys a separator is placed near the engine, into which leads a twenty-two inch steam pipe which takes through four twelve inch pipes the steam from each boiler. The stop valves in these pipes can be used to shut off any of the boilers. The boilers are three-quarters of an inch thick on the shell and tested to stand a working pressure of over 100 pounds. An entirely new arrangement is the ash elevator that carries the ashes from the fire room overboard.

The wheels, Morgan feathering, are twenty-five feet in diameter outside of buckets. In each wheel there are two cast iron flanges seven feet in diameter, and in each flange there are twelve wrought iron arms. The buckets are ten feet and three feet four inches wide and 4 1/2 inches thick.

The new steamer broke the first trip passenger steamer's record by just one minute, the City of Detroit on her maiden trip, making the distance, 103 miles, in 6 hours, 6 minutes, 10 seconds, the City of Alpena in 5 hours, 58 minutes, and the new City of Cleveland in 5 hours 57 minutes. The time from Detroit to Bois Blanc light, 20 miles, was 56 minutes, with two and a half mile current.

Alongside the engine under the main deck is the electric light plant furnished by the Brush Electric Light Company. It consists

CHICAGO.

Special to the Marine Record.

Thomas Bageley, yacht and boat builder, has been making things lively this spring, having built yaws for the following vessels: G. Ellen, City of Chicago, Amsden, Ellsworth, Ironsides, Tempest, Moore, M. A. Gregory, Mary E. Ayer, Driver, Golden Fleece, a life boat for the propeller Boscebel; a yawl for one of the Peshtigo barges, also one for use at Nelson's saw mill, Sheboygan; ten Whitehall boats for John Wetherall, Racine, Wis.; two of same for Leopold & Austrian, for parties at Duluth; one Whitehall rowboat for parties at Pullman, Ill.; one 16-foot row boat and one 15-foot cedar boat, copper-fastened, finished with black walnut, with nickel row locks, for E. H. Barker, Aurora, Ill., for use on Lake Geneva; one 18-foot sail yacht for Mayor D. Barclay, Elgin, Ill., for use on Fox lake; one 19-foot sail yacht for E. Grimes, South Haven, Mich.; one 18-foot sail yacht for A. D. Sprague and others, this city; two 18-foot steam launches for D. P. Noble Elk Rapids, Mich.; two 17-foot yaws for the Milwaukee Shipyard Company's new steambarge; three steam yaws for C. P. Willard, of this city, 32 feet, 25 feet, and 24 feet, respectively; one six oar galley, 40 feet long, 4 feet 5 inches beam, 3 feet 10 inches deep, copper fastened and riveted, finished in mahogany; and a life boat for the propeller City of Grand Traverse.

C. O. Malingren launched a steel steam launch from Bagley's boat yard last Saturday. She is 27 feet over all, 6 feet 2 inches beam, 32 inches depth of hold. She will have a three-horse power engine, boiler 26 inches by 40 inches, wheel 22 inches diameter 40 inches pitch. She is a counterpart of the launch built for E. J. Lehman last summer for use on Fox lake.

Grain freights are considerably lower this week, charters having been made at 2 1/2 c on wheat to Buffalo. Lumber freights are somewhat on the rise and hopes are entertained that they will improve still more.

The tug Paddy Murphy, recently purchased from George Gilman, left this port for Cleveland last Saturday in command of Captain C. T. Grover. She is a very fine tug and was built by Captain John Martel at Saugatuck, the well known tug builder. She is 78 feet over all, 17 feet beam, 9 feet depth of hold. She has two 17-square engines and her boiler is a 6x13. She will make an excellent addition to Cleveland's towing power.

The schooners C. C. Trowbridge and Jack Thompson were each supplied with one of Chester's patent fog horns this week.

The V. O. T. Company's tug Rebel, Captain Barry, was in Miller Brothers' Drydock Tuesday, getting a new wheel. She was built in 1871 at Buffalo by G. H. Notter, and this is the first time she has changed her wheel for a new one, although she has done lots of hard work in our river and on Lake Michigan.

The steambarge Jim Sheriffs, Captain Wm. Chamberlain, from Marquette, with iron ore, put in her first appearance at this port this season on Saturday last with her consort, the schooner Pathfinder. Captain Chamberlain has done excellent work with the Sheriffs already this season. She was laid up at Cleveland and since leaving that port she has been to Toledo, Ogdensburg, Port Huron, Buffalo, Milwaukee, Marquette and Chicago, good freights and good luck having attended her all through.

The steambarge James H. Shrigley, Captain G. Olson, arrived Tuesday morning with lumber from Ashland, her first arrival here this season. She took a load of salt from Manistee to Duluth. She encountered considerable ice at Duluth and some at Ashland, but had splendid weather between the latter port and Chicago.

The L. M. & L. S. Company's steamship City of Duluth, Captain Lyman Hunt, arrived Saturday, having made a very successful round trip to Duluth and intermediate ports, carrying many passengers and a large quantity of merchandise.

The city fire tug is being pushed forward with rapidity at Miller Brothers'. Considerable of her outside planking is already in place.

The new steambarge Carter, Captain Carter, recently built at Milwaukee by Wolf & Davidson, arrived here Monday afternoon, for the first time, lumber laden. She was much admired as she proceeded up the river, and Captain Carter has good reason to feel proud of his handsome little steambarge.

At Chicago Drydock Company's the steambarge S. H. Johnson was on dock getting her bottom calked, some new keelsons, a general overhauling and a new wheel; the barge Marinette was in for calking; the barge May Richards to have a leak stopped; the tug O. B. Green for calking; schooner Lucinda Van Valkenburg for calking bottom and top sides; schooner Ellen Spry had her center board box calked and a new gaff; the schooners Mary E. Cook and Eveline Bates new anchor stocks.

At Miller Brothers' shipyard the tug Uncle Sam was in dock for calking; the tug Rebel for a new wheel; steambarge Mary Groh for a new rudder and to have her shaft straightened; schooners Annie Dall and C. J. Roeder to have leaks stopped and some repairs; the steambarge Tempest for a new stern post and new shoe; the schooner L. J. Conway for a new stern post and stern and other repairs; the tug Crawford was at the derrick having her wheel fixed.

Messrs. Miller are fixing their yacht Minnie M. fitted out, ready for the June races.

WILLIAMS.

MARITIME LAW.

DUTY OF VESSELS ENTERING NARROW PASSAGES—OBLIGATION OF VESSELS OBSTRUCTING RIGHTFUL NAVIGATION.

U. S. District Court, Southern District of New York.

1. Vessels bound into narrow channels, which are obstructed, are bound to wait for further time or other means of help, or until the obstructions are removed, if they would avoid liability for the risks incurred.

2. Vessels which lie projecting across narrow passages, frequented by other craft, are obstructions to navigation. The interest of navigation requires that such encroachments, which make the passage dangerous, be held wrongful on the part of the projecting vessel.

3. Where the tug Sanford, with a heavy car float, attempted on the ebb tide to enter the narrow channel which leads to the Empire Oil Works on the East River, into which channel projected the bows of the steamer Tantallon, which was lying at the bulkhead, and the car float struck and damaged the bows of the steamer, for which damage this libel was filed, held, that the tug was in fault for making the attempt to enter, which was manifestly dangerous, and the steamer was liable for obstructing rightful navigation.

Brown, J.

About noon of March 24, 1885, the steam-tug Margaret J. Sanford having in tow alongside a boat loaded with railroad cars went up the East River bound for the Empire Oil Yard docks at Hunters Point. The docks are approached by what is called a canal 157 feet wide. Above the canal a bulkhead extends some 600 feet along the East River used by heavy draft vessels; and at this time the British vessel Tantallon was lying along the bulkhead loading with oil, and her bows projecting some 15 or 16 feet beyond the corner of the bulkhead across the line of the canal. The opposite bank of the canal extends some 95 feet further to the westward into the river; and from that point the bulkhead runs down, along which, at this time, another vessel was moored, her stem projecting up river and across the canal some 30 feet, and her bowsprit some 30 feet more. The railroad float was about 180 feet long by 30 feet wide, and was on the port side of the tug, which was about 80 feet long by 18 feet wide; the stems of the two being about in line. The proofs show that this was the best mode of lashing, and that the pilot directed the navigation from the pilot house, which was also the safest and the most proper place for him. The tide was ebb; the day pleasant. On approaching the canal, observing the obstructions, the pilot hailed the Tantallon when about 30 feet distant, and desired to tie up alongside, but was answered by a man from the wharf that he must not do so, but should come into the canal. In afterwards attempting to go into the canal the port corner of the float struck the Tantallon's starboard side, some 8 or 9 feet from the stem, and broke two iron plates and one frame, which were repaired at an expense of \$700.94. The damages were near the water line and the loading of the vessel was suspended to repair them, as was stated, for seven days. The libel was filed to recover the damages, for the repairs and the delay.

From the facts described, as well as from the evidence of the witnesses examined at the trial, I must hold that upon the ebb tide, with a cumbersome float, it was neither prudent, nor reasonably safe to attempt to go into the canal at that time with the obstructions which encumbered it. This seems to have been understood and appreciated from the first; and this, it seems to me, makes the tug legally chargeable with fault for making the attempt. Perils of the seas cover only such dangers as remain after the exercise of ordinary prudence in avoiding dangers; not risks that are voluntarily entered upon, when the undertaking is seen to be not reasonably safe. Vessels desiring to land, or go into slips, if they would avoid liability for such risks incurred must, I think be held bound to wait for further time or for other means of help, or until the obstructions are removed. The tug in this case was certainly not in any such situation *in extremis* as compelled her to enter the canal in spite of the obstruction. The inconvenience of waiting for slack water, or of obtaining other help, is not to be compared with the dangers or the injuries likely to arise from pushing on in spite of evident special dangers.

1. 2 cannot hold vessels lying like the Tantallon with their bows projecting across the entrance of slips, or of a narrow canal frequented by other craft free from fault. Such projections are obstructions to rightful navigation in thoroughfares designed to be kept open, where without any obstructions there is none too much room for reasonable navigation. This passage was much used for floats of this description. The tug and float were consigned in this interest to this dock within the canal; they had a right to

go there, and not to be kept unreasonably waiting; and it seems to me clear that the interests of navigation require that such entrances should be kept open, and that encroachments which make the passage dangerous to be held wrongful on the part of projecting vessels. The owner of the dock located this steamer, it is said, as she was placed; but he also directed this tug and tow to proceed up the passage. It does not appear that the canal was private property. I must assume it to be a public thoroughfare, which no vessel had a right to obstruct. The fact that the owner of the dock requested the vessel to go there is no defence to her, though that might make him also liable; nor does his direction to the tug to come into the creek excuse the tug. As between the two vessels, the direction given to either is no defence to the other. There was plenty of time and opportunity for the steamer to have been moved back and away from the creek, after the vessels astern of her had gone away, and before the tug arrived; and so far as appears, the continuance of the vessel up to that time with her bows projecting over the creek, was without valid excuse as well as wrongful.

In the case of the Canima, (17 Fed. Rep. 271,) the projecting vessel was held on appeal not chargeable with damages on the sole ground, as I understand the opinion, that the other vessel had no business to be in the place where the collision occurred; otherwise it is estimated the damages would have been divided. In the present case, the canal or dock was the place where the tug was bound, and where she had a right to go; the approach was narrow; the Tantallon had no right to be where she was, so as to obstruct the canal; and both must therefore be held chargeable with fault contributing to the injury. (The Baltic, 2 Ben. 452.)

I allow the libellant \$750, for one-half her damages, unless a reference be desired, which either party may take, if wished. The costs are also divided. My decision was arrived at before the application by the libellant to take the additional deposition, and has not been influenced by it.

May 1, 1886.

THE LORENZO DIMICK CASE.

Justice Corlett, on May 8, handed down a decision in the case of the people against Lorenzo Dimick, who was convicted of grand larceny in the Court of Oyer and Terminer, at Buffalo, N. Y., denying a motion for a new trial. The case has become very well known through the prominence of Mr. Dimick and its peculiar circumstances. The firm of Crosby & Dimick were general agents for the state of Pennsylvania for the Union Continental, and the Thames & Mersey marine insurance companies. The firm received commissions at the rate of 45 per cent. on the business transacted, and 10 per cent. on net profits in all the companies except the Continental, which was 9 per cent. and 15 per cent. These general agents could reinsure although the cargo of a vessel was lost at the time. A large amount of business was transacted by the firm in the season of 1883. During that year disastrous storms prevailed upon the lakes, numerous losses occurred, and the result of the season's business was very disastrous to most of the companies. In November 1883, the cargo of the schooner James Wade was insured in the Union Company for \$10,500; it was reinsured in the Continental for \$7,000, and the vessel sailed from Detroit on November 11th. She was lost on or before the 16th. Under ordinary circumstances she should have reached Buffalo within 38 hours after leaving Detroit. The evidence tended to show that after such loss and knowledge of the same by the defendant he caused \$5,000 of the reinsurance in the Continental to be transferred to the Thames & Mersey, which paid the loss.

The indictment was for grand larceny. It contained three counts, and charged in substance that this sum was feloniously obtained by the defendant with intent to defraud the Thames & Mersey. A demurrer interposed by the defendant was overruled, and a trial last October resulted in conviction. The theory of the people on the trial was to the effect that the defendant deemed it for his interest to discriminate in favor of the Continental at the expense of the other companies and that at the time the Wade was lost the books of the firm showed profits on the season's business in favor of the Continental and heavy losses against the other companies. It was also claimed that Mr. Dimick had discriminated the whole season in favor of the Continental, and that the moment he heard of the loss of the Wade, \$5,000 of the reinsurance of that company was transferred to the Thames & Mersey for the benefit of the Continental and himself. The defendant claimed that all the evidence introduced failed to prove the offense charged; that the defendant had a right to reinsure after knowledge of loss, and that the fact that he was actuated by fraudulent intent did not affect his right or create an offense, and also insisted that the people's theory, if proved, failed to establish the offense.

After reciting the above facts and the objection made by the defendant to the trial Justice's charge that whether the reinsurance was legal or illegal was immaterial, Justice Corlett says:

"It is very clear that the defendant's guilt does not depend upon the legality of the

insurance. How that question may be between the company reinsuring and the original insurer is not important. The question here is whether the general agent could, with felonious intent, defraud one company for another's benefit without being guilty of the offense. If he could escape by saying, 'It is true that the company I defrauded paid the money; still it was bound to pay because the company for whose benefit the reinsurance was made could collect to the extent of the reinsurance, and I am as much protected as the company'—if he could escape upon this claim then no offense was proved; but that question is not involved in this controversy between the companies."

Other exceptions and objections to the charge and to the admission with brief comment and the quotations of authorities, Justice Corlett further says:

"It is well settled that circumstances will create presumptive knowledge in criminal as well as civil cases; it is also true that when it is in the power of the person to explain, his failure to do so is strong presumptive evidence against him. If the defendant had no knowledge of the contents of his books and those in which his business entries were made, or of the telegrams sent him or the firm in the usual course of business, or of the insurance or reinsurances effected by the firm it was certainly in his power to show it."

LEAKAGE OF IRON SHIPS.

At the recent meeting of the institute of naval architects in England, interesting discussions were had upon the construction of iron ships, and a member advanced the views here quoted:

"It is urged by some that in cases where vessels have become seriously strained, it may be taken for granted that the structure is sufficiently sound and undisturbed at the butts of the outside plating, if it becomes impossible to insert a testing knife in the butts. This I dissent from, and I am sure I shall be borne out by many practical surveyors, that iron or steel vessels may be very considerably strained and become unseaworthy when loaded, from leakage at the butts of the outside plating, although it would be impossible when the vessel was on blocks to insert the thinnest blade of a knife in the butts of the plating. I will instance one case in support of this view. I was called on, in conjunction with some of my colleagues, to survey a large steamer which had nearly foundered in consequence of leakage through the outside. When the ship was in drydock, a most careful survey was made of all the butts, but it was impossible to detect any opening of them, neither could any insertion whatever with a thin knife blade be made. Those who sailed the ship pointed out on the inside where water had poured in at the sides of the butt-straps in a fan-shape sufficient to endanger the safety of the ship when she was laboring and straining in a heavy sea. This vessel had to be strengthened at a cost of more than £10,000 before she was again sent to sea, after which no leakage occurred, showing conclusively that the water found its way through the butts, though no thing indicating the same externally could be seen. Many cases of this kind are known to practical surveyors. Such being the result of experience, I am of opinion that where a vessel has been severely strained to such an extent as to produce distortion of form, the straining at the butts would require the refitting of the butt-straps and consequent riveting before a surveyor could feel justified from mere local external appearance in assuming that the connection of the butts was uninjured."—*Mechanical Engineer*.

LIQUID FUEL FOR STEAMSHIPS.

The system of oil-burning apparatus recently described by us as having been fitted on board the Himalaya steamship has been applied to a vessel recently launched by Messrs. Wigham, Richardson & Co., of Newcastle-on-Tyne. The steamer is intended for the Black Sea trade, and to be permanently oil-burning, has her waterballast tanks divided up, and made available for the storage of her fuel. She has also other storage tanks built into the ship on each side of the engine room, all these being connected by pipes to the small feed tanks situated above the boiler. A large supply pipe connected through valves to the storage tanks allows of the vessel being filled up with fuel in a very short space of time. The oil-burning apparatus has been fitted by the Tarbutt Liquid Fuel Company, of 75 Lombard street, London, and is similar to that adopted on board the Himalaya, which recently made her successful trial trip from London to Granton and back on the new fuel. A trial of the apparatus has just been satisfactorily completed at Messrs. Wigham, Richardson & Co.'s works, which was attended by representatives from some of the leading shipbuilding and engineering works on the Tyne, who are evincing great interest in this most recent development of the liquid fuel question. A number of applications of this system are now being made to marine and stationary boilers, stills, and plate-heating furnaces.—*London Times*.

An interesting case has been decided by the Treasury Department. Recently a Mississippi man found a small schooner at anchor in a bay, abandoned by her master and crew, and as he held a mortgage on the vessel he manned her on his own account and sailed her into the nearest harbor. When the collector of the port heard of the matter he fined the mortgagee ten dollars because he could not produce papers showing that he was entitled to command the vessel. The mortgagee protested against payment of the fine on the ground that he found the vessel abandoned and he had merely sailed her to a harbor in order to keep her out of danger in an open roadstead. Assistant Secretary Fairchild, in his decision on the appeal, says the mortgagee had a lawful right to take charge of the vessel when he found her abandoned, and he ordered the collector to remit the fine.

THE GREAT POWER OF COAL.

Some idea of the latent power in a single pound or ounce of hard coal can be gathered from the following simple illustration: In the village of Evanston, twelve miles north of Chicago, the water supply is drawn in through pipes running out into Lake Michigan, by steam pumps, which drive it with great force through other pipes extending over the town. From these it escapes with velocity enough to be thrown through hose pipes over the tops of tall buildings, and thus does away with any necessity for fire engines. Many other villages and cities have the same arrangement. The point of interest is in the report of the engineers stating that during December, 1842 400 gallons, or 131,299,200 pounds, of water were thus drawn and forced through the pipes, and that to do this a trifle over twenty-five tons, or 50,282 pounds, of coal were burned. This shows that every pound of coal in burning expanded water into steam with a sufficiency of power to force 2,611 pounds, or over one and one-fourth tons of water through the pipes at the high pressure described. Besides this, there was the friction of the machinery and of the water along the sides of the pipes. According to this a bit of coal the size of a pea, or about one-eighth of an ounce, supplies power enough to force a painful, or twenty pounds of water through a mile or two of pipes, and shoot it out as high as a church steeple. What enormous power there must be stored in the quiet black deposits of any single coal mine, however small!

Another familiar illustration is that of the locomotive. A little heap of coal in the tender develops power enough to draw forty loaded freight cars, averaging perhaps twenty tons each with the loading, or 800 tons, faster than a horse can run, and for a distance of forty miles or more, and up a grade of say sixteen feet to the mile; this is equivalent to lifting the whole train straight up in the air 640 feet, or one-eighth of a mile, besides giving it the rapid forward motion, and overcoming the friction of the wheels and other running gear.

LITERARY NOTICES.

HARPER'S MAGAZINE for June is in every way an unusually strong number. The leading article, "The United States Navy," is contributed by Rear-Admiral Edward Simpson, U. S. N., and no one is more competent than he to say precisely what our navy is, and what it ought to be. He shows how slowly the first step—from sailing to steamships—was taken; how reluctantly, later on, iron ships were substituted for wooden ones; then with what difficulty we recently adopted the construction of steel cruisers; and that we are still waiting for the two final achievements that will make our navy effective—the steel armor plating of our ships, and the construction of heavy steel guns, equal to those made abroad. The article is profusely illustrated—each class of vessels being represented, including the recently constructed "Dolphin," "Atlanta," and "Chicago."

ATLANTIC MONTHLY.—The June number opens with the second installment of Mr. William Henry Bishop's striking new serial, "The Golden Justice," and the number also contains portions of Henry James's very remarkable socialistic novel, "The Princess Casamassima," and Charles Egbert Craddock's brilliant romance, "In the Clouds." Under the title of "A Roman Gentleman under the Empire," Miss Harriet W. Preston gives a charmingly life-like account of the younger Pliny, and of his times. Mr. Edward Stanwood contributes a paper on American history entitled "A Glimpse of 1786," and an important critical article on Honore de Balzac is written by Mr. George Frederic Parsons, of the New York Tribune. "James, Crawford, and Howells," form the subject of an able piece of critical writing. This excellent number is concluded with some good poetry and the usual Contributors' Club and Books of the Month. Houghton, Mifflin & Co., Boston.

HARRIET ROSS.

Recently a paragraph was printed in these columns, taken from the Chicago Inter Ocean, asserting that the schooner Harriet Ross was rebuilt from one of Commodore Perry's boats, and that she participated in his great victory on Lake Erie. The paragraph has brought out the following statement from a correspondent:

The schooner Cambridge came to Monroe, Michigan, in the summer of 1844, under command of Captain Helfrich, and hailed from Sackets Harbor. She was purchased by Messrs. Noble & Sterling, commission merchants, of that place, and was sold to J. M. Booth, lumber merchant, of Buffalo, in 1853, who built the schooner Harriet Ross from her bottom. Captain Helfrich claimed that the Cambridge was rebuilt from one of Commodore McDonough's gun boats which was in service on Lake Ontario and won the naval battle in 1813.

Mr. John Corrigan, who came from Cleveland to Duluth during the winter and determined to locate here, engaging in the manufacture of lime, is almost ready for business. Mr. Corrigan's engineer has arrived and states that he expects to be turning out lime within a month. A change is desired in the grade of Seventh avenue west, near the lime kiln, and the council will be called upon to act on the matter to-night. It is reported that a St. Paul firm will also build lime kilns here this summer, but, as yet, no particulars are obtainable. The Corrigan lime kilns will send salesmen out through Dakota and Minnesota and will doubtless soon form one of the leading industries of Duluth.—*Duluth Herald*.

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Adopted and in use by
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tubular metallic packing
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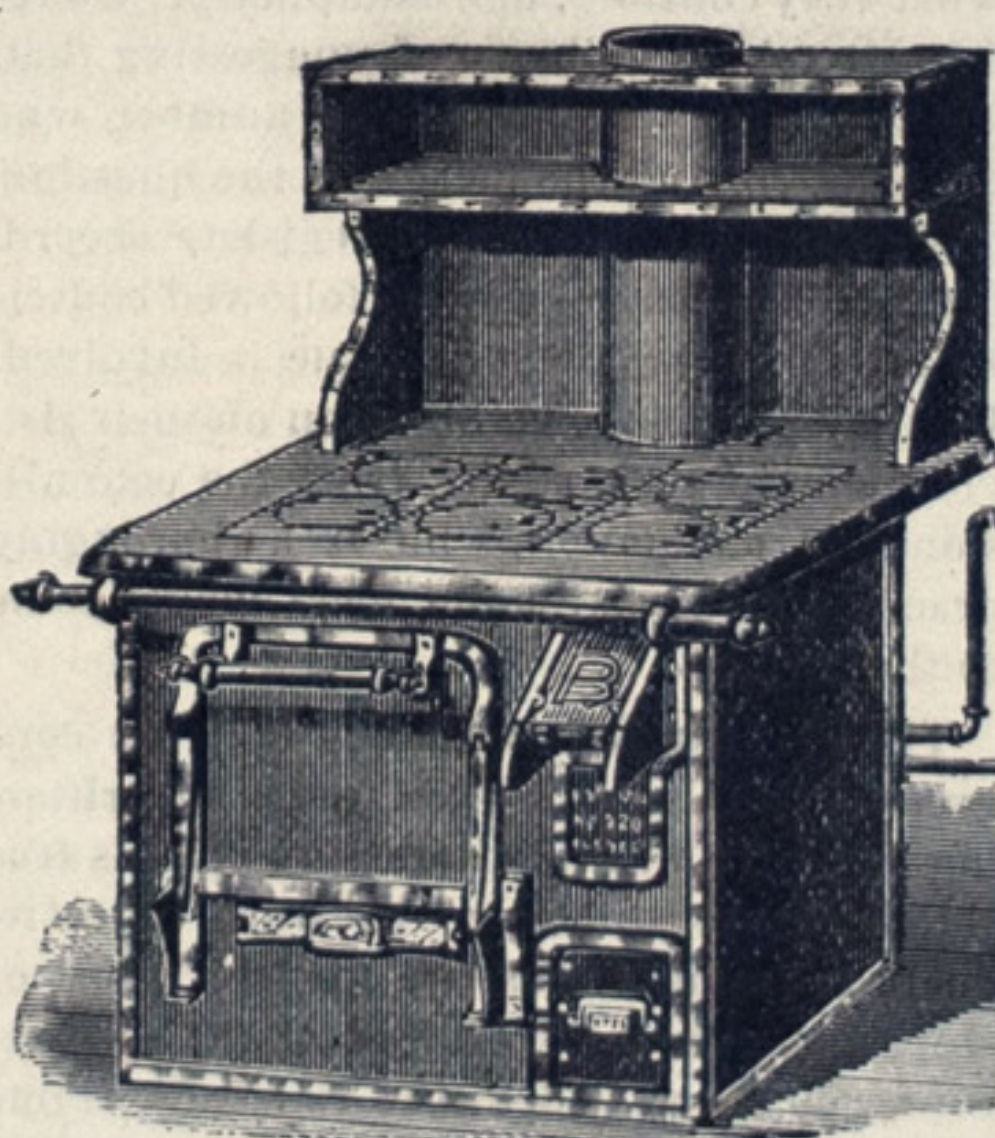
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utes slower than Cleveland time proper.

Eastward.	Arrive	Depart.
No. 4, Fast Limited Express.....	12 55 A M	1 05 A M
No. 8, N. Y., B. & A. Express.....	12 25 A M	1 35 A M
No. 26, Elyria Accommodation.....	12 15 A M	1 25 A M
No. 24, Buffalo Ac'm via Sandusky.....	10 30 A M	11 40 A M
No. 24, Toledo Accom via Norwalk.....	10 30 A M	11 40 A M
No. 12, N. Y. & B. Fast Express.....	12 10 P M	1 20 P M
No. 14, Special New York Ex.....	12 10 P M	1 20 P M
No. 2, Night Ex via Norwalk.....	9 40 P M	10 50 P M
No. 22, Night Ex via Sandusky.....	10 40 P M	11 50 P M
No. 26, Conneaut Accommodation.....	14 25 P M	15 35 P M

Westward.

Arrive	Depart.
No. 1, Fast Limited Express.....	12 15 A M
No. 23, Mich Express via Sandusky.....	12 15 A M
No. 3, Chicago Express via ".....	12 00 A M
No. 25, Mich Accom Norwalk.....	11 30 A M
No. 21, Toledo Ex via Norwalk.....	11 50 A M
No. 5, St. Louis Ex via Sandusky.....	10 50 A M
No. 9, Chi Pac Ex via Norwalk.....	10 50 A M
No. 31, Elyria ac to Elyria only.....	6 15 P M
No. 27, Conneaut Accommodation.....	15 10 A M

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Reference marks—* Daily, † daily, except Sunday,
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Marine Record.

Published Every Thursday at 144 Superior Street, [Leader Building] Cleveland, O.

A. A. POMEROY, EDITOR AND PROP'R

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Subscribers and others are respectfully invited to use the columns of the MARINE RECORD for the discussion of pertinent topics.

Entered at the Post Office at Cleveland as second-class mail matter.

CLEVELAND, OHIO, THURSDAY, MAY 27.

MERCHANT MARINE AND FREE SHIPS.

It has been held by good authority that during the first few years of the operation of the French bounty law, applied to shipbuilding in that country, and up to the time similar measures of governmental relief for that industry were adopted by other countries, shipbuilding in France took a great stride forward; and that as soon as other nations came to the relief of the shipbuilder in the shape of a subsidy France again fell back to her normal condition; that is, as soon as she was obliged to compete with shipbuilders in other countries who had the same encouragement as her own, she again occupied the same comparative place in the line as before. It is, therefore, evident that a government bounty or subsidy gave great impetus to the shipbuilding business in that country, great assistance in building up the merchant marine, and in other countries in the same ratio. In the meantime the legislators of this country are to-day endeavoring to smother our shipbuilding industry by their efforts to pass a free ship bill, a bill which, if passed under any guise, will make shipbuilding plant of all kinds worthless in this country, for the reason that our builders, with a heavy tariff on all crude material, and no government assistance will be compelled to bid for the construction of ships against the builders of other countries who enjoy the aid of their governments in every respect. It is certainly a short-sighted body of legislators who surround and urge to passage this free ship bill. Almost every branch of industry in this country is protected except that of shipbuilding, while in England free trade rules in everything except the shipbuilding interest, which is protected, subsidized, fostered, and upheld with zealous care by the government, and our builders could not possibly compete with the Englishman, although they build better ships. If a bounty system was good in France, England, Germany and Italy, and enabled those countries to compete with each other in the shipbuilding trade, it certainly would be of inestimable benefit to the shipbuilders of this country and to the country at large. It is thus that those countries protect their shipbuilding interests against other countries. If it is wisdom to protect our lumber product by tariff, it is wisdom to protect our shipping. This country puts a tariff on foreign lumber with one hand, which results in the destruction of our magnificent forests, and with the other offers premium of money and lands for the planting of trees, so that our woodlands may not be depleted. While our lake tonnage is at this time nearly, if not quite equal to the requirements, and is the finest and best equipped coasting fleet in the world, if some measure of assistance to the American shipbuilder were passed by congress, it would serve to stimulate the eastern capitalist to invest in shipping. The yards on the coast could then afford to build ships as cheap as the noted yards in England or any other country. This action would enable our merchant marine to compete with

that of other countries in the carrying trade and create or stimulate a demand for the produce of the great west, the bulk of which must necessarily be transported by the lake carriers.

The free ship bill, under consideration in the house, is a flagrant wrong to the American shipbuilder, who has, at great expense and without a particle of encouragement from this government, provided himself with iron shipbuilding plant; and also to the American workman, as it will enable a citizen of the United States to go to a foreign country and buy or cause to be built steam or sailing vessels, all complete and furnished, bring them to this country and have them registered as American vessels. As Mr. Romeis said recently in the house, the proximity of "Canada would naturally cause those who wanted to buy cheaply to go to that country and purchase the many rotten hulks that can there be found; there are any number of them to-day in the River St. Clair. American capital, which might be invested in this country and thereby afford employment to American labor, would be diverted to Canada. What a pitiable spectacle it would be for Americans to see our own capital go from Buffalo, Cleveland, Detroit, Marine City, Bay City, Grand Haven, and other lake cities which have plants for shipbuilding and furnishing, while our mechanics stand idle about the docks? What applies to the lakes applies as well to the ocean. England has a thousand idle ships, although the law now proposed here is in vogue in that country. Every old ship that this country would buy over there would put two new ones on the stocks and give employment to England's mechanics. The government must pursue some other policy if it would build up American shipbuilding. Is not the policy which other nations have successfully pursued a safe one for this country to follow? Millions of dollars are expended every year for the maintenance of mail routes on land which do not pay for themselves, but it is contended that the pursuance of the same policy on the sea would not be right. With American shipping in its present feeble condition the country would be in a sorry plight if the fishery complications should give rise to war. The merchant marine is often termed the militia of the ocean."

It is generally believed in maritime circles that congressmen do not, as a rule, understand the shipping question well enough to talk intelligently upon it. It is, therefore, not a favorite question at Washington. As the Maritime Register says, "it does not offer that opportunity for much talk and little work which congressmen find so frequent in matters of less moment and what they consider, more simplicity," therefore we take the liberty of suggesting that, if they have one among their number who does understand the merits of the question, they adopt his views and legislate accordingly. This course can be followed conscientiously, as no political issue is involved. If they have no such Solomon on their list, they should seek advice from the commissioner of navigation, who is a thoroughly practical man, and much good would come to the surface."

The MARINE RECORD holds that the congress of the United States, instead of frittering away time in the discussion of this free ship measure, should go to work industriously to frame a measure for the relief of shipping, give it governmental aid and encouragement as it does the railroads, frame a bounty law similar to that adopted in France in 1881. The French bounty, in case of a steamer, built in France, amounts to 17½ per cent of her total cost price. Suppose the steamer to have cost \$250,000, the bounty earned would amount to about \$44,000. On an iron or steel sailing ship of 1500 tons gross measurement, the bounty would amount to \$18,000, at the rate of \$12 per ton gross measurement. On a wooden ship of 1000 tons gross, the bounty would be \$4,000, at the rate of \$4 per ton gross. At the same time the law suppresses the importation, free of duty, of all materials destined for shipbuilding. Consequently, shipbuilders there, as in this country, have to pay full duty on all materials they import, which is more than offset by this system of bounties. It would, therefore, appear the part of wisdom if congress, instead of adding to the perplexities of the shipbuilder and owner, would adopt some measure of relief, either like the French bounty system or a system of bounty for mileage.

The light on the west pier head at Michigan City has been discontinued because of the unsafe condition of the pier. Mariners are cautioned against mistaking for this light the light shown by the harbor engineers from the east pier.

MARINE PAPERS.

"Funny, isn't it, that the lake marine interests will not insist upon having a first-class paper devoted entirely to their interests?" The speaker was a vessel owner who was examining a pile of marine journals. "It is a fact," he continued, "that there isn't a first class marine paper in existence in this country. Chicago had one not long since. During the short six months of its existence I will say that it was the best marine paper ever published in this country. Its editorials were clever, its news matter fresh and gossip, and its general reading matter of a superior quality. Chapin struck hard to make the paper pay but he finally wearied of his thankless task, and one day last October he wrote its valedictory and vacated his office in the Lumbermen's Exchange Block. It was not until the readers of this paper ceased to receive it that they found how valuable it had been to them. Other bright young fellows have attempted to make Chicago the home of a first-class marine journal, but their efforts have never been successful. Chicago vessel men, with characteristic indifference, have never sympathized with their efforts, and in fact did all they could in some cases to destroy the enterprises. It is not many years since that the first lake marine paper was founded at Detroit by a gushing young man, whose sole object in life was to tell people he met that he was the son of a lake captain. Then the MARINE RECORD was founded at Cleveland, and it alone has survived—*Inter-Ocean*."

We may add to the above that Chicago has had, during the existence of the MARINE RECORD two marine papers, our subscription list in that city being the incentive for their foundation. We trust there are no more young marine editors in that busy city who have the marine paper fever for they will simply lose their money in the effort to supplant the MARINE RECORD. As regards the statement that no first-class marine paper has ever been published in this country, it is possible that the promoter of the above does not know it all. The present patronage of the MARINE RECORD in subscribers and advertisers is quite good evidence that it fills the bill. The Inland Marine published in Chicago run into a cheap story paper and its readers did not know its value until they failed to receive value for the money they paid, and the Chicago Nautical Herald, which preceded it in life and death, was not what the Chicago marine reader demanded. Of all the marine papers ever started west of New York City the MARINE RECORD is the only one that has proved itself fit to survive. We do not like to quote the Darwinian theory but have been forced to it. We thank our numerous Chicago readers and Mr. Williams, our efficient Chicago agent, for the support and appreciation they have given us against all comers.

THE SHIPPING BILL.

Representative Dingley has become the father of shipping bills and the friend of the mariner. The Senate on the 17th passed the Dingley bill which provides that certain license fees heretofore charged by the government on the skill of masters, pilots and engineers shall be abolished. The same bill abolishes the fees charged for inspection and registration of vessels. The bill provides that on and after the 1st of July, 1886, no fees shall be charged by collectors of customs or other officers of customs, or by inspectors of steam vessels, or shipping commissioners for their service to vessels of the United States. Collectors and other customs officials who are paid wholly or partly by the fees are to make a detailed report of their services and the fees provided by law sent to the Secretary of the Treasury, who shall pay them such compensation for the service; also such compensation for the clerks and shipping commissioners as would have been paid had this act not passed. Section 4,289 of the Revised Statutes is amended so that the law passed June 26 relating to the limitation of the liabilities of owners of vessels shall apply to all vessels used on lakes or rivers. It also provides that in every vessel a number denoting her net tonnage shall be deeply carved or otherwise permanently marked on her main beam, and a fine of \$30 is imposed for neglect. Foreign vessels found transporting passengers between ports in the United States shall be liable to a fine of \$2 for every passenger landed.

Referring to the clause abolishing fees of masters, pilots and engineers, this justice is slow but nevertheless welcome. Since the cause which gave a pretext for assessing a tax on the labor of this class of men was removed there has been no valid reason for continuing the levy. The workers who are relieved of a vexatious burden are the only ones who have been compelled to pay a premium on their skill since the income tax was repeated.

It is said that it costs \$1.23 to collect every \$1 of revenue at Superior City. Try a plan of retrenchment by annexing that port of entry and delivery to the Duluth district.

THE Senate has passed a bill providing for the establishment of a number of additional life saving stations, one at or near Plum Island, Lake Michigan, one at South Manitou Island, one at South Chicago, one in the Straits of Mackinaw, one at or near Duluth and one at the mouth of Niagara River. This is good news for the mariner. The work on these stations should be pushed as rapidly as possible, especially on that contemplated for Duluth. While Lake Michigan is comparatively well supplied with life saving stations, the Minnesota coast of Lake Superior has stretches of one hundred and fifty miles between stations. The immense amount of tonnage now trading into the port of Duluth renders the establishment of a station at that harbor imperative and it should be done before the fall gales set in. Captain McDougall, for his persistent work in securing this valuable addition to Duluth harbor, deserves much credit. The station will probably be erected near the lighthouse.

A DISPATCH from Buffalo says: Lorenzo Dimick, general agent of the Continental Insurance Company, was sentenced by Judge Childs to five years hard labor at Auburn prison on his conviction of grand larceny in the third degree, in reinsuring the Continental into the other three companies of the "Big Four," after losses had occurred. Dimick did not show any agitation as sentence was pronounced, but looked better than when tried. His face is perfectly white, and he looked far from being a well man. On a motion for a stay of proceedings Dimick gave bail in the sum of \$10,000, Charles A. Sweet, president of the Third National Bank, becoming his security. Notice was given of an appeal to the general term of the Supreme Court. The details of the case will be found on another page and the decision of Judge Corlett.

The pilotage bill now before Congress, and in which lake men are interested, will hardly be reached this session.

LAUNCH OF THE JAMES PICKANDS.

On Saturday, the 22d inst., there was launched at the shipyard of Messrs. Quayle's Sons, the fine steamship James Pickands, of 1545.90 gross, 1318.60 net tonnage, and with carrying capacity of about 1900 tons. We have given the minor details of her construction heretofore.

The launch was attended by an unusually large number of spectators, and a lusty cheer went up from people and tugs, as, under the signal from Thomas Quayle, the lines were cut and the new boat dropped into the waters of the Cuyahoga, and the great wave chased the small boy up the alley. When she settled she showed a draft 9 feet 3 inches aft and 4 feet 5 inches forward. The vessel, which has been built for Messrs. Moore & Bartow and others, has the following dimensions: Length between perpendiculars 232 feet 6 inches, beam 40 feet, depth 19 feet 2 inches. She will carry three spars. In designing the vessel special attention has been given to make her a large carrier for her inches, and she will without doubt come fully up to the requirements. She has been built to the highest class, and with the Quayle Brothers' usual care, and their long experience, she will not disappoint her owners in any particular.

The machinery of the James Pickands consists of a Globe compound engine, cylinders 28 and 52 by 42 inch stroke, counter-part of that in the Kasota, and two steel boilers 8½ feet diameter and 16 feet long, allowed 110 pounds of steam. The boilers were also built by the Globe Iron Works, as were the iron houses aft. The iron work was done by the well known ship-smiths, Ward & Jackson, and the carpenter and joiner work by Mr. Parker. Her fitout will be furnished by J. W. Grover & Son, and the boat will go into the ore and coal trade by the first of next week. The James Pickands will be officered by Captain Smith Moore; mate, Chas. Ennis; second mate, Thomas Ellen; engineer, J. P. Swain, and assistant engineer, C. Roe.

BAY CITY.

Special to the Marine Record.

F. W. Wheeler's new propeller the Ossifrage, has proved to be a success. She made the run from Alpena to Black River, a distance of about twenty-eight miles, in less than two hours. She is giving perfect satisfaction on the route, and will be well patronized. Captain Byron Armstrong is in command.

FOR SALE CHEAP.

The fine tug John Gordon, of Chicago. Length over all 82 feet, beam 17 feet 10 inches, depth of hold 9 feet; engine 20x22; boiler 6 feet 8 inches by 13 feet, of 01s steel. She was built two years ago by J. Marcel, Saginaw, and is one of the finest tugs in Chicago. Apply to George Gilman, 210 South Water street, Chicago.

DETROIT.

Special to the Marine Record.

May 25.—It was on this date just sixty-seven years ago, that the first steamer to cross the Atlantic ocean took her departure from Savannah, Ga., for Liverpool, England. Her name was the Savannah, of 350 tons burden, commanded by Captain Moses Rogers, and had on for fuel 75 tons of coal and twenty-five cords of wood, and was just twenty-three days in making the passage. When first seen on the coast of Ireland she was thought to be a ship on fire. She worked her engines eighteen days, and then used her sails at intervals. The next steamer to cross the Atlantic was the Royal William, in 1831, from Quebec, via Halifax.

As to general topics of the present time there has been but little of interest for the past week. The excitement, which, for a time, was going on between the rival steamers Cole and Idlewild, has pretty much subsided, and the racing mania gone by, so that passengers need fear no longer any danger from that source. The fare on either boat has been brought down to a low figure, and as a consequence both are meeting with a liberal patronage.

The harbor tugs, of which there is a plentiful supply, complain of the hard times, yet for the most part they are kept on the alert at various occupations. Occasionally a vessel in a lumber tow is dropped off and a harbor tug takes her to Trenton or some other point for discharge. The tug John Owen, which left here some time since with three consorts for Lake Superior, became disabled at or near the Sault by a broken crank pin and was towed back to Detroit, and again left to complete her voyage.

The schooner Blazing Star, arrived here a day or two since, and while being discharged, put on a new dress, substituting a black for a white, which has improved her appearance.

Charters from here to Buffalo and to Lake Ontario have fallen to 13¢, wheat, to the former port and 4¢ to the latter ports. There is a good demand for tonnage in coarse freights at fair rates.

The steamer Pearl will soon be in readiness to resume her old route between Cleveland and Put-in-Bay Island, to connect there with the steamer Alaska for Detroit or Sandusky. This will enable passengers to enjoy a daylight trip between Detroit and Cleveland at a much less fare than the other route. Captain John Edwards will be with the Pearl, and his well known popularity will induce many to travel by this route.

The schooner Harvey Bissell, which clandestinely skipped from here during the hours of darkness some time ago, to what point no one seems to know, has been heard from at Chicago, at which port she was chartered for Georgian Bay, and it is quite probable that her passage this way will be deferred to the long future. The tug Kate Williams, which it was alleged, towed the Bissell from this port, has not shown up here since that memorable occasion. A day or two since she brought a tow of vessels from Buffalo up to near the Detroit river, when they were turned over to the tug Gladiator which took them on to Lake Huron.

Both lines of steamers, plying to Mackinac are doing a profitable trade and have invariably full freight both ways. The Atlantic, of Grummond's line, which left on Saturday night, beside a full cargo and quite a number of cabin passengers, had upward of hundred in the steerage.

The tug John Martin is held in readiness at this port for wrecking, and will be accompanied by the wrecking schooner Young America, fitted out for that purpose.

The tug Wm. Park has been added to the Moffat line and kept actively on the move. The tug Winslow, of Grummond's line, is held for wrecking emergencies at Mackinac.

The tug Champion passed down on Friday with one of the finest tows of the season, consisting of five vessels, all three-masted of large size, and with all sail set and colors flying.

The Lake Superior steamers which pass this way from the copper region, have cargoes almost exclusively flour, the India with no less than 1,000 tons on board. There is only one exception, the Arctic, which goes no farther than Hancock, where she is freighted with copper for Detroit.

The steamer Toledo, of Ward's line, passed down on Friday from Lake Superior, with 3,000 barrels of flour, but with no news of importance.

Captain James Moffat, it is reported, contemplates chartering his steamer, the O. D. Conger, to Chicago parties, to ply there during the excursion season, for which she is well adapted.

The barge Lambton was sold here on Saturday noon by the United States marshal to

Wm. H. Fox, of this city, for \$1,400. She is one year old, 140 tons burden, and cost \$4,000.

The steambarge C. N. Pratt, which was partially burned at Windsor last year, was sold a day or two since to Captain Tom McGowan and a Mr. Chamberlain, of that town. She is to be reconstructed at once for the lumber trade, and her name changed. The price paid could not be learned.

The latest arrival from the Sault river reports the schooner Champion, laden with railroad iron, aground in Lake George, leaking, with the tug Trempe and lighter at hand, endeavoring to get her afloat.

The steamer Algoma, which was here for repairs, has gone back to the Straits.

Among the passages this way there is an occasional reminder of other days, and not a few of the long past. This was noticeable on Wednesday, by the passage of the barge R. N. Rice, which was built at Detroit in 1865, a side wheel steamer, and for several years was the pride of the Detroit and Cleveland line, commanded by Captain Wm. McKay from first to last. While lying at the dock here June 10, 1877, she took fire and was so badly damaged as not to be worth restoration. Subsequently she was converted into a lumber barge and carries an immense cargo.

Alger, Smith & Company's steamers are the only ones that have thus far this season been engaged in bringing rafts from Lake Huron, which are taken on to Toledo.

The barge built by John Craig at Trenton the past winter for D. Whitney, and named the Ashland, has gone into commission, and is consort to the steamer D. Whitney. She is a fine looking vessel, adapted to any trade.

Captain Blanchard's steamer Justice Field, just fitted out, came up on Saturday from Trenton, and with her consorts, has gone into the lumber trade.

Mr. John Craig, at Trenton, has paid off his men and shut down all branches of his business for the present.

Steamships, steambarges and all other steamers can have access to O. W. Shipman's coal dock, day or night, without interference from vessels discharging, as is frequently the case at other docks. The following have taken on their fuel at his wharf within the past few days: Steamers Porter Chamberlain, City of Concord, City of New Baltimore, Atlantic, Bruno, Folsom, N. K. Fairbanks, Chancey Hurlbut, Iron Age, S. J. Macy, Massasauga, Nashua, Nipigon, S. E. Sheldon, Jim Sheriffs, Sanilac, Schoolcraft, Toledo, M. Sicken, Winslow, Ruby, Ida, Mineral Rock; tugs Jessie, River Queen, Oswego, Williams, Dave & Mose, Oneida, M. D. Ward, Winslow, James Reed.

The steambarge J. S. Fay, upward bound, with coal, found bottom Sunday afternoon, and was afterward released by the tug Kitty Haight and lighter. She sustained no damage, and passed up on Monday afternoon with two consorts.

The steamer Arctic, Captain Thorne, arrived down from Lake Superior Monday afternoon, having been no farther than Hancock, which has been the limit of her route for a few seasons past. Captain Thorne saw nothing of the schooner Champion, in trouble at Lake George, so we may conclude that she has proceeded on her voyage. The Arctic brought down 350 tons of copper and other cargo.

The steamer S. F. Hodge, of Ward's line, also arrived on Monday from Lake Superior, with flour from Duluth and copper from Hancock, consigned to Buffalo.

The revenue steamer Fessenden, took her first exercise the latter part of the week, skipping over to Toledo Saturday and returning Sunday.

Yesterday being the Queen's birthday there was a large influx of people to this city from nearly all the adjacent ports. They were especially numerous on the river steamers. The ferry steamer O. D. Conger, from Port Huron, also had a large number, stated by one of her officers to be five hundred.

The steambarge White & Friant, which has been in trouble for two or three days at St. Clair flats by getting a line in her wheel and grounding, was released yesterday and passed down last evening.

The weather here has been cool for two or three days; wind northeast. HALL.

AMHERSTBURG.

The marine department have provided a fog bell for the Colchester reef light house, and the same is expected to be placed in position in about a week.

The tug William Parks has been added to the Moffat Tug Line fleet. She will tow the barges Monitor and Church during the remainder of the season between Huron, Ohio, and Point Edward.

The new lighthouse to be built at Park & Borrowman's will now have to be erected

in the water and not on the bank. The change is necessary, owing to shifting the range lights, caused by the widening of the Limekilns cut.

The propeller Alma Munro, of Port Stanley, has been sold by auction to Chas. J. Hodge, off Buffalo, for \$15,000. The propeller, which was built in 1872, originally cost \$40,000, and was owned by the Elgin Transportation Co.

The United States Government has refused permission to Captain Donnelly, of Kingston, to use Canadian tugs in raising the steamer Algoma, sunk off Isle Royal, Lake Superior, notwithstanding that the Dominion Government allowed United States tugs to be used last year in raising the steamer Owen Sound, lying in Canadian waters.

Charles Coates, aged 9 years, was drowned on the 18th from a small craft, when opposite Springwells. Three young men were of the company, but failed to rescue the lad before it was too late. He hailed from Port Huron.

SARNIA.

A new fog signal will be erected at Thunder Cape at once. The outfit went up per steamer Ontario last trip, and was landed at Silver Islet, she not being able to touch at the cape. This will prove a great convenience to all boats on that lake, as great difficulty was often experienced in foggy weather on account of no signals. The contract for putting it in position has been awarded to Mr. Wm. Burgess, of Port Elgin, who will push the work forward as soon as possible.

The fleet of tugs which lay in the bay all winter decorated with notices of seizure etc., are at last out of limbo. The International moved out last Sunday to pull off a vessel which got aground at Point Edward. The Admiral D. D. Porter is also away and the Charlton is now fitting out and will likely leave in a day or so.

CLAYTON.

Special to the Marine Record.

The yacht Vision came up on Thursday and went to Johnson's shipyard and used his derrick to put in her spars.

The steamer Ontario laying at Gananoque creek since last fall was sold on a mortgage, on Thursday for twenty-five hundred dollars. Only one bid was made and she was struck off at that price. There were lots of steamboat men at the sale but no one stood ready to raise it; that is buying a steamboat cheap there must have been a hitch some where, as she cost \$30,000. Griffin & Mullen of Watertown got her.

The signal flags are displayed now every day from the Walton house, so vessel men take notice.

The steambarge Mary Pringle arrived from Cleveland on Friday night with lumber for the new hotel at Edgewood park Alexandria Bay. The propeller Onelda passed up on Saturday morning.

Mr. John Udell, engineer of the steamer John Thorn, arrived last week and will put the Thorn in running order at once.

The steamer Magic will run to Kingston on the Queen's birthday, the 24th and the steamer Jessie Bain to Gananoque. B.

DULUTH.

The necessity for a board of local steamboat inspectors becomes more apparent daily. Inspector Hays Wednesday morning hurriedly inspected three tugs and was to have inspected the Mollie Spencer, but he was compelled to take the Omaha train and did not have time to do it.

The Spencer expired Saturday and according to law she will be compelled to lay up until Mr. Hays returns and makes the required inspection. During his brief stay he inspected but half the boats under his jurisdiction at this port.

The News says Captain McDougall has bought of the Duluth Improvement Company a considerable block of lots at the base of slip No. 2, just in the rear of the Northern Pacific dock, and proposes to go more extensively into the sand business than ever before. He will begin in a day or two building two large scows for bringing in sand from the bay, and expects to arrange his dock with such machinery that the cost of handling will be greatly lessened.

The Sun says the elegant little steam yacht A. Booth, arrived from Chicago this week, and she makes a most desirable addition to the fleet which plies from Duluth to neighboring ports. She is 115 feet in length, 14 feet beam, and on excursions has a special permit to carry sixty passengers. The Booth easily makes 16 miles an hour, and Captain Antoine Paul will give excursion trips to the Apostle Islands and Two Harbors Sundays during the summer. In regard to seaworthiness the Booth ranks with the best. She can make the harbor at Chicago in the roughest sea, under a full head of steam, when large boats anchor out-

side to ride out the storm. Captain Paul is very proud of his craft, and is glad to have every one who wishes, to come and inspect her.

ST. CLAIR FLATS.

Special to the Marine Record.

On Saturday while the steambarge White & Friant, bound down, with four barges in tow, going around southeast bend, ran aground on the Canada side of the channel. She is out four feet forward. The barges passed on and came to anchor opposite Bedore's landing. Saturday at 4 a. m. the steamer City of Dresden, of Dresden, Ont., tried to release her, but did not succeed. While the Dresden was working at her her hawser got in the White & Friant's wheel, stopping the engine, rendering it useless. Just before the White & Friant ran on, a low fog set in, making rushes and water all look alike. We sympathize with Captain Charles Brown, as he is a skilled and careful master. Had the Canadian authorities not prevented Messrs. McNiff & Son from putting up their ranges they would have been lighted last night, but they are obliged to wait for permission from Toronto, which will, we hope, be received ere this is printed. The steamer run on at the mouth of Little Bassett. She was released after lightering most of her deck load.

On Saturday at 10 a. m. the scow Hannah Moore, while working down, got aground below the Canada club house on the American side. McN.

FRANKFORT.

Special to the Marine Record.

Captains Dodge and Cowan, U. S. hull and boiler inspectors, were here on the 20th, inspecting the steamers Jessie Slyfield, Andrew Gale, Sanford, etc.

The steamer I. M. Weston is now running on Green Bay, making daily trips to Menominee from Sturgeon Bay.

Tug L. Q. Rawson has had a sheet iron plating placed on her, cabin top and her smoke stack painted red.

E. G. Chambers made a trip to St. Ignace, to look over the propeller Gordon, with a view to purchasing her and placing her on the route between Manistee and Charlevoix.

Schooner Jane Anderson left for Escanaba on Friday, laden with potatoes and shingles.

Propeller George Burnham came into port Friday afternoon for shelter. She was loading at the piers, but the southwest wind stirred up too much of a sea, and she was forced to leave with only a part of a cargo.

Tug J. C. Osgood, of Manistee, is now towing here. BURMEISTER.

MINORVILLE.

Special to the Marine Record.

Schooner Canton is expected here from Cleveland with 500 tons of coal, it being the first installment for the coal yard just now started at this place. In seasons past, boats that have been delayed by headwinds, have called in here in quest of coal with which to finish their trips; but were compelled to go away without the necessary fuel. Several lower lakers called in last season for that purpose. E. S. Minor, proprietor of the new yard, says he has arranged so that he can sell coal cheaper than it can be bought in Milwaukee. Several boats of this vicinity have expressed their intention of coaling up at this yard, and already several outside parties have made known their approbation of the scheme.

The traffic through the canal, for the past three weeks has been confined to local vessels, and outsiders on off trips. But the regular fleet came through yesterday and last night, a tangible sign of final settlement of lumber trouble in Chicago. C.

RACINE.

The tug Balize arrived here last Thursday morning having in tow the coal laden schooner H. C. Richards, of Manitowoc, which was badly damaged by collision with an unknown vessel near the Straits a few nights since. The Richards' starboard bow is badly stove, and she is leaking considerably. Her head gear was also partly wrecked. A canvas jacket was drawn across the vessel's bow in order to enable her to reach her destination. The Richards has on board a cargo of 1,100 tons of coal. She will be taken to Milwaukee for repairs as soon as her cargo is unloaded.

EAST SAGINAW.

Special to the Marine Record.

A sad accident occurred at Carrollton, two miles below this city Wednesday evening by which Joseph St. Mary lost his life. Captain Robert Medler, who is known to be a careful and competent man, having been in the service for the past twenty years, said that the first he noticed the man he was trying to cross the bow of the Burt in a row boat, which was swamped. Captain Medler did all in his power to avoid the accident, and regrets very much the unfortunate occurrence.

Captain Mike Mohar has returned from Erie, where he went to look at a companion boat for the steamer Lucille, but he came home without her.

The tug Tom Maytham, under command of Captain Jas. Bell, is doing a handsome business, and vessel men trading at this port, will find Captain Jim and his powerful tug good craft to deal with.

H. Steele's new steam lighter and derrick which is properly called "The Derrick," is now employed bringing logs down from the boom to the Saginaw manufacturing works, where they are sawed. The boat has a crane aboard and sunken logs, timber, etc., are picked up from the bottom of the river and loaded on the boat. They generally bring 20,000 feet to a load, and it is said Mr. Steel has struck a bonanza.

Captain George Fletcher is converting the tug Daisy Lee into a ferry boat, and when completed she will ply between this city and Saginaw City.

A. C. McLean is the busiest man on the river, he having large contracts of lightering, which keeps his two tugs, the Browne and Anna going night and day.

The powerful hoisting engines, built by A. F. Bartlett & Company, of this city, were loaded onto a lighter on Tuesday, and taken to Bay City, where they will be placed on Captain Davidson's big log boat in a few days.

KINGSTON.

The forwarding companies have carried more grain during the past month than they did during any two months last year.

Captain H. Stanton, of Platon, has launched a new yacht of 31 feet keel. Her first cruise will probably be made on the 24th to Wolfe Island.

The new yacht Vision was launched at Cobourg, last week. She is the finest mode that has passed through Cuthbert's hands. She was built for Messrs. Block and Burnett, of Cobourg. The dimensions of her hull are; keel, 32 feet 6 inches; over all, 36 feet; beam, 12 feet. She has a cedar spar; hoist, 26 feet 8 inches; boom, 32 feet; gaff, 18 feet. A new steam yacht, the Beaver, is building there also. She will be launched on Saturday, and is 48 feet on the keel.

DULUTH.

About 200,000 bushels of grain carrying capacity was taken last week at 3½ cents per bushel. The enormous quantity of grain that has left Duluth the last two weeks has all been taken out of two elevators and has caused quite a delay to the vessels. Over 3,000,000 bushels of wheat has been shipped within that time and grain is still coming in very fast.

FARM FOR SALE.

A fine farm on the banks of St. Clair river 8 miles from Port Huron and 4 from St. Clair, is offered at a bargain—74 acres for \$7,000; there are 65 acres under cultivation and balance woodland, and all under fence; the soil is clay loam, situated on a bluff and in rock salt belt of Michigan. This farm should find a purchaser very soon; the buildings are good and commodious, consisting of a frame house, two stories, with large rooms and in fair condition; horse barn, grain barn and granary; watered by St. Clair river. Terms of sale, \$3,000 or more down, and balance at 7 per cent.

GEO. W. SNOVER.

103 Griswold St., Detroit, Mich.

FOR SALE.

Barge Mary Garrett is offered for sale. She is 80 feet over all, 20 feet beam and 7 feet depth of hold. Her custom house measurement is 78.45 gross, 74.53 net, and she will carry 180 tons of coal or 100,000 feet of lumber. She received extensive repairs during the winter and some new outfit. Price, \$1,500. Address H. R. RUMSEY, V. O. Shipping Office, Cleveland, Ohio.

G. F. Sheldon & Son have refitted and opened their meat market at Ashtabula Harbor, with a choice lot of meats for the marine trade. They will keep constantly on hand the best quality meat.

THE NEW HARBOR MASTER.

The Canada Gazette of last Saturday contains the appointment of Mr. Robert Macadam as harbor master for the port of Sarnia. We are led to understand that the policy of the newly appointed harbor master will be the very opposite of that adopted by the former incumbent. Instead of levying toll on vessels and driving them away from our port, Mr. Macadam will do all in his power to encourage them to frequent our harbor, and particularly to winter with us. The annoying exactions which caused so much hard feeling among vessel men, and led them almost to decide upon the boycotting of the port, will henceforth be a thing of the past; and we want this fact made known from end to end of the lakes.

The dredging machinery for the excavation of the Panama canal is exceedingly powerful. One of the dredges excavates

3,300 cubic metres per day, and there are two others which excavate 800 and 1,000 cubic metres. Beside these there are a number of smaller ones in operation, in all capable of excavating 37,000 cubic metres per day. It is reported that during the month of February, upwards of 1,100,000 cubic metres were excavated.—Science.

HISTORY OF LAKE NAVIGATION.

BY J. W. HALL.

Written for the Marine Record.

CHAPTER LXXII.

The following vessels passed out of existence during the navigation of 1867:

Propeller Acme, 762 tons, foundered off Dunkirk, \$50,000.

Propeller Wisconsin, 352 tons, burned on Lake Ontario and fifty lives lost, \$40,000.

Propeller North, 388 tons, burned on the St. Clair river, \$20,000.

Propeller Portsmouth, 525 tons, wrecked on Middle island, Lake Huron, \$40,000.

Propeller Owego, 483 tons, lost on Lake Erie, with five lives, \$50,000.

Propeller Sunnyside, 113 tons, lost at Pine river, Lake Michigan, \$18,000.

Tug W. W. Braman, 180 tons, burned at Point au Pélée, \$10,000.

Tug Dispatch, 173 tons, burned at Sandusky, \$8,000.

Tug W. K. Muir, 227 tons, exploded in St. Clair river, with loss of seven lives, \$10,000.

Bark A. Stevens, 320 tons, wrecked in Georgian Bay, \$6,000.

Bark R. G. Winslow, 499 tons, wrecked on Spectacle reef, Lake Huron, \$19,000.

Bark Tubal Cain, 226 tons, lost at Two Rivers, Lake Michigan, \$15,000.

Brig Fox, 405 tons, lost on North Harbor reef, Lake Erie, \$8,000.

Brig Mayflower, 219 tons, lost on Lake Huron, \$18,000.

Schooner Rose Dousman, 133 tons, lost near Buffalo with three lives, \$3,000.

Schooner Helen Kent, 144 tons, wrecked on Lake Michigan, \$2,500.

Schooner Merrimack, 269 tons, foundered in Lake Erie, with five lives, \$6,000.

Schooner Byron, 180 tons, sunk by the schooner Canton in Lake Michigan, \$3,000.

Schooner Commerce, 183 tons, wrecked at South Haven, Lake Michigan, \$4,000.

Schooner Isabella, 180 tons, wrecked on Long Point, Lake Erie, \$5,000.

Schooner Wellington, 298 tons, lost on Skillegalee, \$25,000.

Schooner Barney Eaton, 166 tons, lost, with three lives, on Lake Michigan, \$4,000.

Schooner Carrie Woodruff, 127 tons, lost on Lake Michigan, \$8,000.

Scow Free Mason, 34 tons, sunk by propeller Detroit in the Detroit river and three lives were lost, \$2,000.

Schooner W. A. Glover, 162 tons, lost near Toronto, \$10,000.

Schooner Mary Elizabeth, 127 tons, foundered in Lake Erie and seven lives lost, \$5,000.

Schooner John Thursby, 360 tons, lost at Grand Traverse, \$25,000.

Schooner Grapeshot, 369 tons, wrecked on Plumb island, \$9,000.

Schooner Maple Leaf, 299 tons, wrecked on Detroit island, \$8,000.

Schooner Admiral, 167 tons, wrecked near Toronto and one life lost, \$4,000.

Schooner Kate Doak, 146 tons, lost at Pere Marquette with two lives, \$5,000.

Schooner Wave, 180 tons, lost at Nine Mile Point, Lake Ontario, \$10,000.

Schooner Portland, 394 tons, wrecked at False Presque Isle, Lake Huron, \$20,000.

Schooner Chieftain, 303 tons, wrecked on Lake Michigan, \$18,000.

Schooner J. Dresden, 116 tons, wrecked at St. Joseph, \$10,000.

Schooner Hanover, 237 tons, lost in Green Bay, \$10,000.

Schooner Gold Hunter, 386 tons, wrecked at Point au Pélée, \$25,000.

Schooner Albemarle, 270 tons, lost in Mackinaw Straits, \$18,000.

Schooner Snowbird, 180 tons, foundered in Lake Erie; crew saved, \$12,000.

Schooner Queen of the Bay, 73 tons, wrecked near Oswego, \$6,000.

Schooner H. B. Steele, 118 tons, lost in Sturgeon Bay, \$3,000.

Schooner Commodore Foote, 180 tons, sunk by schooner Kilderhouse in Lake Huron, \$14,000.

Schooner Carthaginian, 374 tons, lost on Lake Ontario, \$25,000.

Schooner B. F. Davy, 459 tons, wrecked at Port Colborne, \$18,000.

Schooner M. A. Rankin, 126 tons, wrecked near Buffalo, \$4,000.

Schooner Corinthian, 368 tons, lost on Long Point, \$20,000.

Schooner Baltic, 369 tons, wrecked at Oswego, \$18,000.

Schooner C. G. Alvon, 308 tons, wrecked on Lake Ontario, \$19,000.

Total tonnage, 13,344 tons; total valuation, \$675,500.

As has already been noted, lake freights throughout the season of 1867 were not discouraging, the average on wheat 6c, 8c, and the highest, 15c, and although the times had not improved since the rush of 1865 there were not a few who felt hopeful of a repetition of the former scenes, and to this end shipbuilding, with a large increase of tonnage, began during the early winter of the year, and ere navigation had fairly resumed, fourteen propellers, sixteen barkan tines and sixty-nine schooners were ready to float, beside a fair array of tugs:

STEAMERS.

Name.	Tons.	Where built.	Value.
Northwest,	1100	Manitowoc,	\$140,000
Cora Lock,	68	Toledo,	8,000
Manitowoc,	773	Manitowoc,	120,000

OFFICIAL NUMBERS AND SIGNAL LETTERS: TREASURY DEPARTMENT, BUREAU OF NAVIGATION, WASHINGTON, May 22, 1886.

To the Editor of the Marine Record:

Following is a list of merchant vessels of the United States to which official numbers and signal letters were assigned by the Bureau of Navigation, Treasury Department, during the week ended May 15, 1886:

Official Number.	Signal Letters.	Rig.	Name of Vessel.	Tonnage Gross.	Net.	Home Port.
SAIL VESSELS.						
106,412		Sc.	Ashland,	991.24	956.57	Detroit, Mich.
106,413		Sc.	Agnes,	44.44	42.22	San Francisco, Cal.
126,346	K D J B	Sc yt.	oronet,	160.70	152.67	New York, N. Y.
135,882		Sl.	E k,	15.26	14.15	Richmond, Me.
120,638		Cat.	Farmer's Friend,	13.10	12.45	Newport, R. I.
76,623		Sc.	Jane A. Smith,	16.17	15.36	Goshen, N. J.
116,099		Sl.	Spy,		14.76	Empire City, Oregon.
28,106		Sl.	Zaida,	6.85	6.51	New York, N. Y.
STEAM VESSELS.						
106,410		St s	Artie Ward,	7.64	5.51	St Joseph, Mich.
106,411		St p.	A. C. Freese,	205.74	175.31	San Francisco, Cal.
157,175		St s.	D Du sault,	55.86	39.42	San lusk, Ohio.
76,623		St p.	J. T. Atlee,	37.83	37.83	Fort Madison, Iowa.
110,696		St s.	Rob Roy,	14.76	7.38	Cleveland, O.
116,098		St s.	Sappho,	275.55	137.78	Mount Deseret, Me.
81,110		St s.	W. B. Taow,		71.58	LaCrosse, Wis.
27,628		St s.	Yukon,	29.69	14.85	Seattle, Wash.
UNRIGGED VESSELS.						
29,964		Barge.	Adaline,		141.06	Middletown, Conn.
46,362		C. bt.	J. R. Vanderwerker,	111.75	106.17	Albany, N. Y.
59,562		Barge.	Relief,	214.70	214.70	Bath, Me.
62,876		C. Bt.	Wm W. Beebe,	138.02	131.12	New York, N. Y.

JARVIS PATTEN, Commissioner of Navigation.

PROPELLERS.

Acadia,	393	Hamilton,	\$40,000
Jacob Bortschay,	318	Sheboygan,	42,000
Boscobel,	919	Chicago,	80,000
Ira Chaffee,	300	Allegan,	25,000
Schnuyler Colfax,	73	St. Jose h,	20,000
Colorado,	1118	Buffalo,	80,000
George Dunbar,	340	Allegan,	25,000
M. Groh,	174	Cleveland,	25,000
Henry Howard,	261	Port Huron,	30,000
Huron City,	473	Sandusky,	30,000
Nebraska,	1304	Buffalo,	85,000
Oswegatchie,	385	Cleveland,	35,000
R. Prindiville,	246	Gibraltar,	28,000
Yosemite,	310	Sandusky,	35,000

BA "SEA"

Cavalier,	300	Quebec,	\$20,000
Zack Chandler,	726	Detroit,	50,000
E. Corning,	978	Tonawanda,	60,000
Donaldson,	420	Tonawanda,	35,000
Glenbalah,	602	Sheboygan,	30,000
W. T. Graves,	805	Cleveland,	55,000
Elizabeth Jones,	754	Buffalo,	40,000
J. C. King,	617	Saginaw,	36,000
Pennaukie,	578	Sturg'n Bay,	40,000
Frank Perew,	667	Cleveland,	45,000
W H Vanderbit,	520	Sagraw,	35,000

SCHOONERS.

Albatross,	152	Oakville,	\$ 9,000
Apprentice Boy,	270	Milwaukee,	18,000
Ariel,	225	Quebec,	10,000
Aurora,	301	Quebec,	19,000
200 Avon,	8,000		
390 Clayton,	25,000		
J. R. Bentley,	771	Fairport,	38,000
Mary B rkhead,	210	Oak Harbor,	10,000
Sam Bolton,	377	Bay City,	15,000
Clough,	300	Black River,	15,000
Lyman Carey,	396	To edo,	20,000
Camsanche,	408	Oswego,	20,000
H. G. Cleveland,	327	Black River,	20,000
S. B. Conklin,	200	Vernumilion,	7,000
Cossack,	408	Oswego,	23,000
Dacotah,	320	Fairport,	17,000
Margaret Dall,	197	Mich City,	12,000
Dart,	50	Green Bay,	3,000
222 Oakville,	14,000		
100 Black River,	6,000		
136 Green Bay,	10,000		
469 Huron,	32,000		
30 Sheboygan,	1,000		
236 Perryburg,	11,000		
130 Portsmouth,	8,000		
426 Manitowoc,	24,000		
365 Cleveland,	20,000		
390 3-Mile Bay,	20,000		
75 Black River,	4,000		
Golden Rule,	363	Buffalo,	25,000
Wm. Grandy,	568	Cleveland,	40,000
Green Bay,	244	Fish Creek,	8,000
W. T. Greenwood,	172	Pt Dalhousie,	10,000
E. Harmon,	370	Ashtabula,	20,000
265 Erie,	16,000		
91 Milwaukee,	2,000		
226 Milwaukee,	16,000		
390 Oswego,	25,000		
173 Pt Dalhousie,	8,500		
350 Tonawanda,	16,000		
389 Toledo,	20,000		
517 Cleveland,	28,000		
496 Perryburg,	28,000		
320 Harrisville,	17,000		
301 Quebec,	18,000		
379 Gibraltar,	22,000		
108 Milwaukee,	4,000		
387 Henderson,	20,000		
A. Mosher,	415	Ashtabula,	24,000
Truman Moss,	305	Sandusky,	18,000
H. P. Murray,	224	Oakville,	14,000
Nevada,	390	Oswego,	20,000
New Dominion,	271	Hamilton,	14,000
Orion,	308	Hamilton,	15,000
S. S. Osborne,	855	Fairport,	50,000
Otonabee,	301	Port Hoje,	18,000
Persia,	200	Hamil on,	12,000
Sweetheart,	538	Detroit,	45,000
M. Slounson,	465	Green Bay,	22,000
South Side,	137	Milwaukee,	6,000
David Stewart,	632	Cleveland,	40,000
Sweepstakes,	256	Hamilton,	13,000
H. N. Todman,	165	Wellington,	7,000
Trinidad,	370	G. Island,	22,000
52 Sheboygan,	2,000		
Union Jack,	317	Mill Point,	14,000
Walhalla,	150	Dejere,	5,000
Wave Crest,	230	Brookville,	12,000
Hattie Wells,	400	Port Huron,	22,000
W. Wilhouse,	83	Fairport,	4,000
Wend the Wave,	250	Ashtabula,	18,000
White Oak,	231	Oakville,	12,500
Geo. J. Whitney,	300	Rochester,	18,000
J. B. Wilbor,	529	Huron,	30,000
Winnie Wing,	280	Green Bay,	16,000

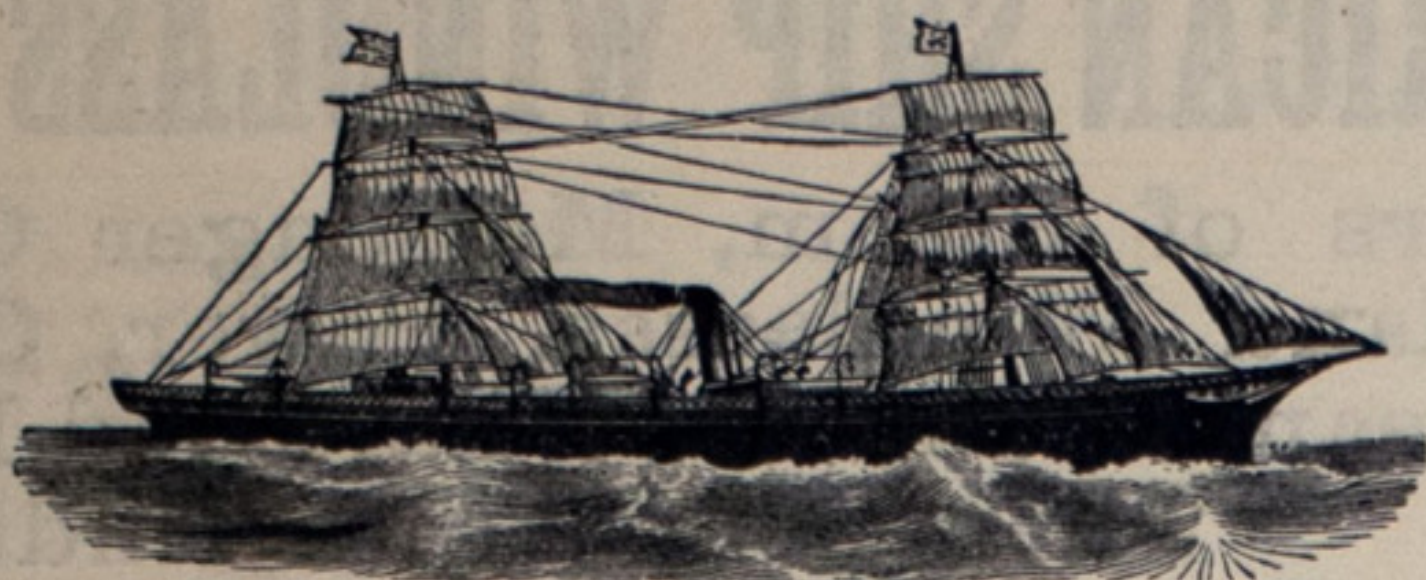
TUGS.

Nellie Cotton,	37	Buffalo,	13,000
F. L. Danforth,	60	Buffalo,	9,000
Farragut,	34	Buffa o,	6,000
Jessie Hall,	107	Buffalo,	14,000
Margaret,	42	Buffalo,	7,000
Jay C. Morse,	63	Buffalo,	12,000
O. L. Nims,	66	Buffalo,	9,000
Frank Perew,	82	Buffalo,	12,000
Thomas Quayle,	300	Cleveland,	30,000

New Tonnage, 39,157 Valuation, \$2,668,000

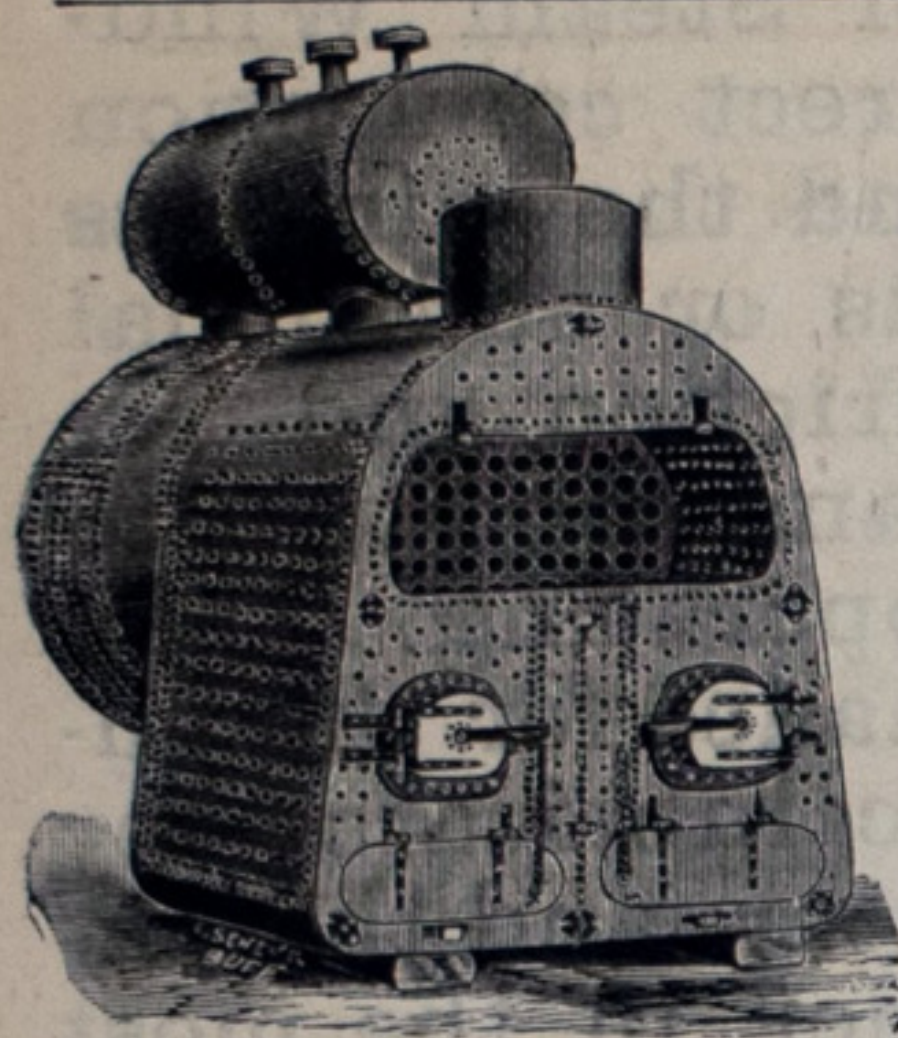
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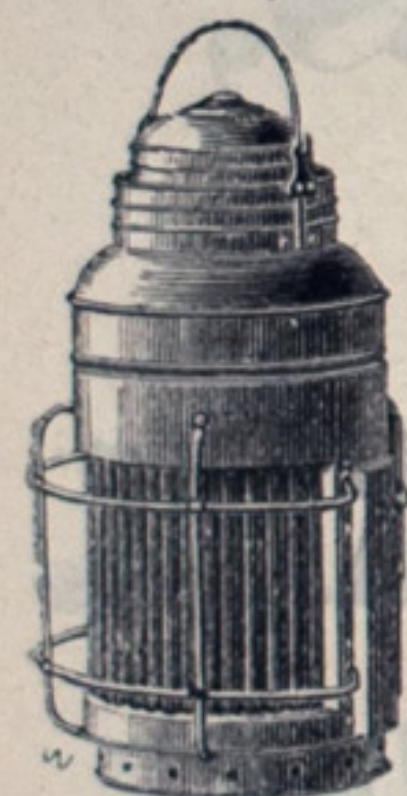
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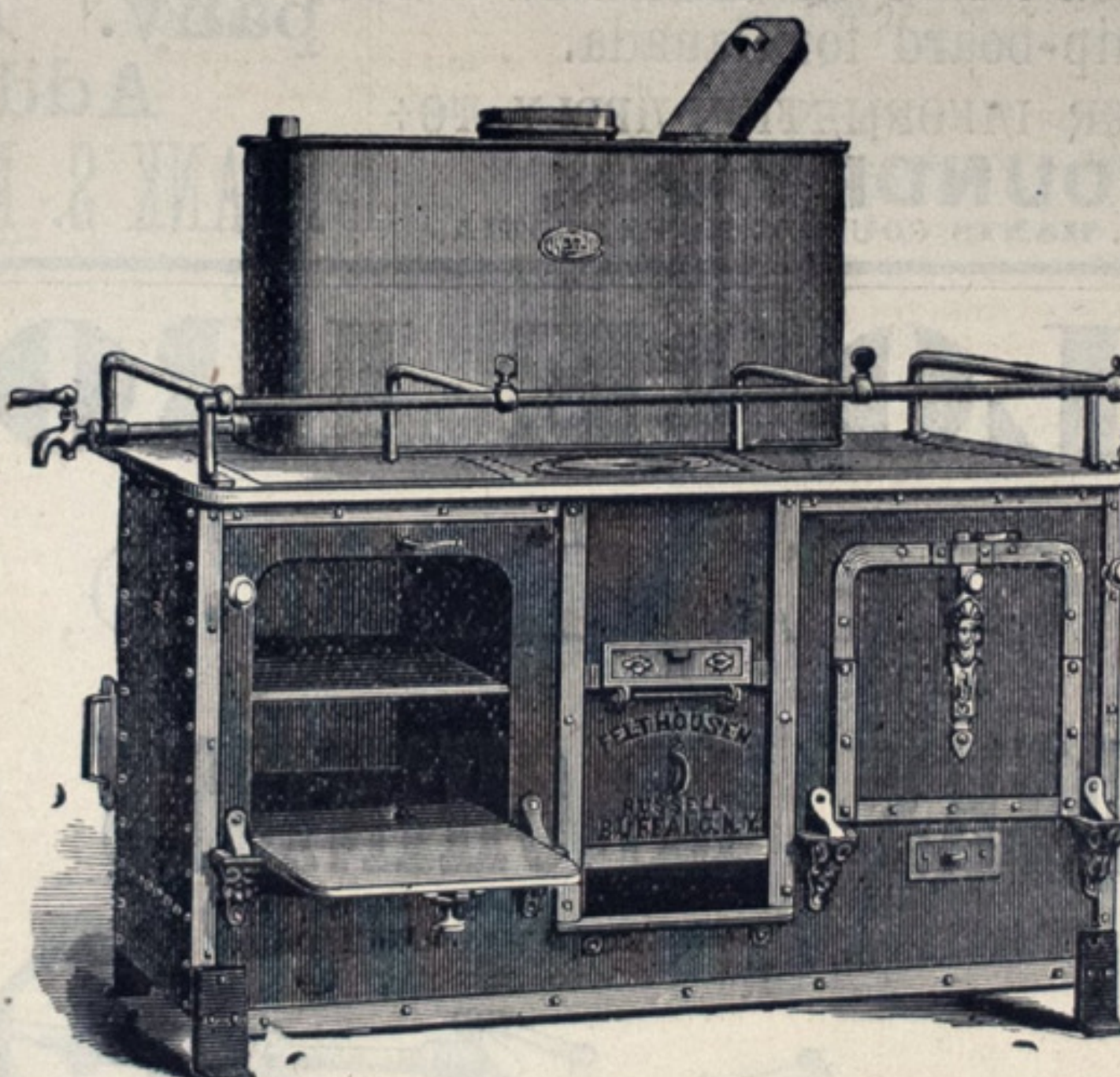
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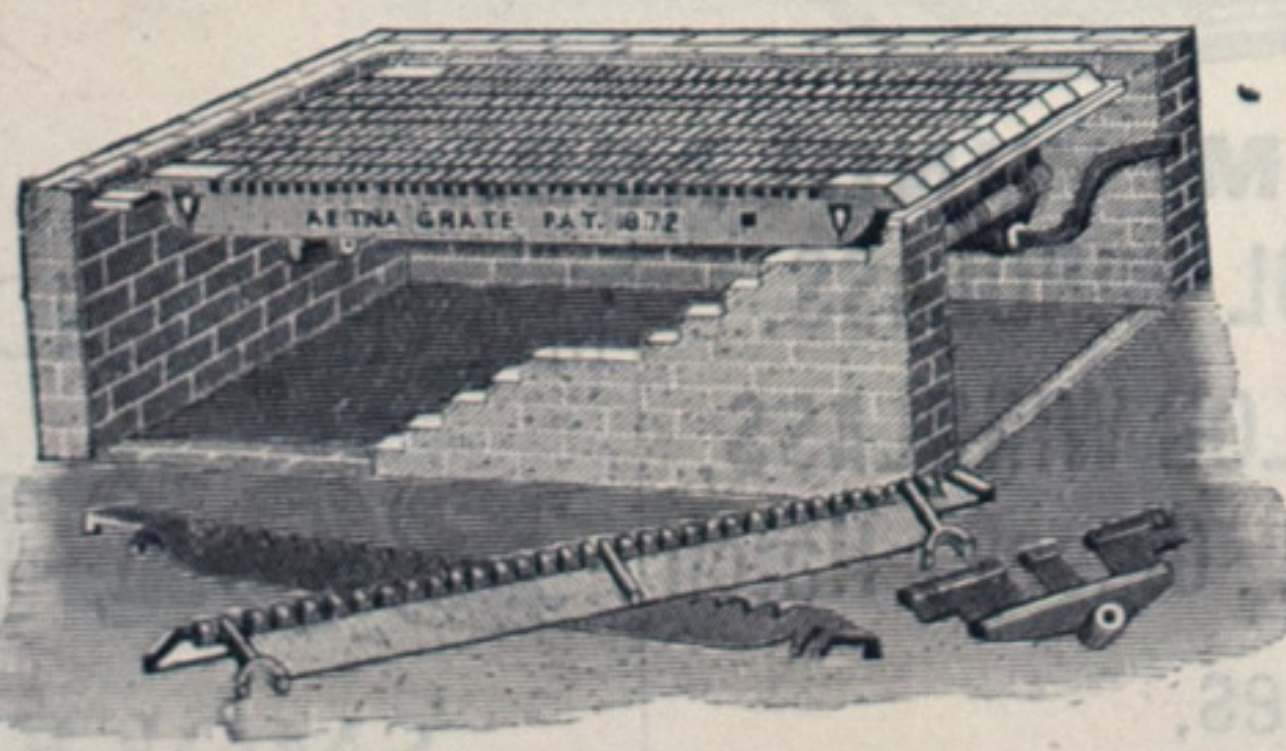
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SECOND HAND MARINE BOILER four feet wide,
6 1-2 feet long, 5 feet high, sixty-four 2 1-2 inch tubes
60 inches long, cast iron breeching, good as new.

A1 TUG FOR SALE.

This tug is 32 feet over all, 13 feet 3 inches beam,
and 6 feet 6 inches depth of hold. Engine, 13x14; steel
boiler 4 feet 6 inches diameter by 9 feet long. The
hull was built by Geo. H. Notter, Buffalo, and is an
excellent model and well built. The tug is nearly
new, having done only five month's work since she
came out new last summer. She has a poop deck and
finished cabin fore and aft, and classes A1. Price,
\$4,300. Address MARINE RECORD OFFICE.

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JOHN WESTAWAY, Chief Engineer M. C. Ferry.

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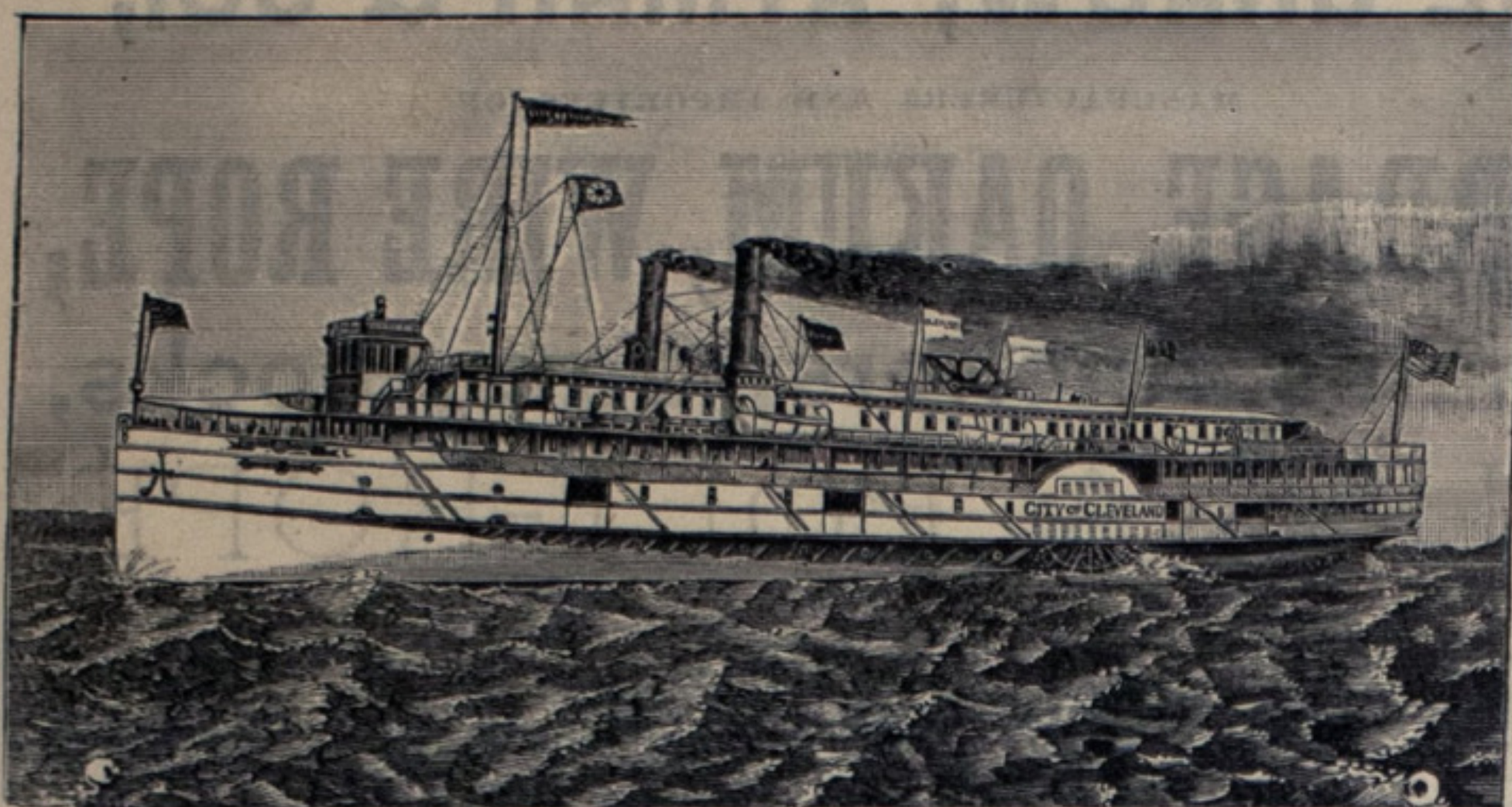
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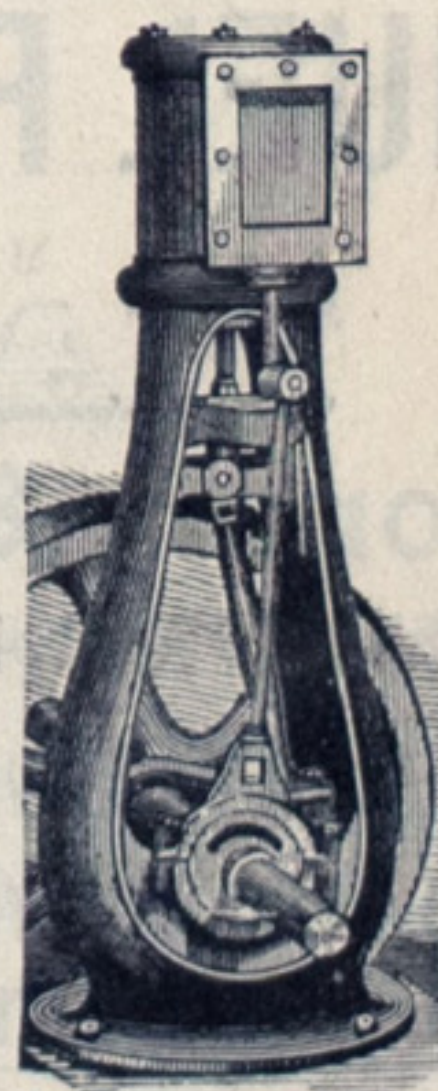
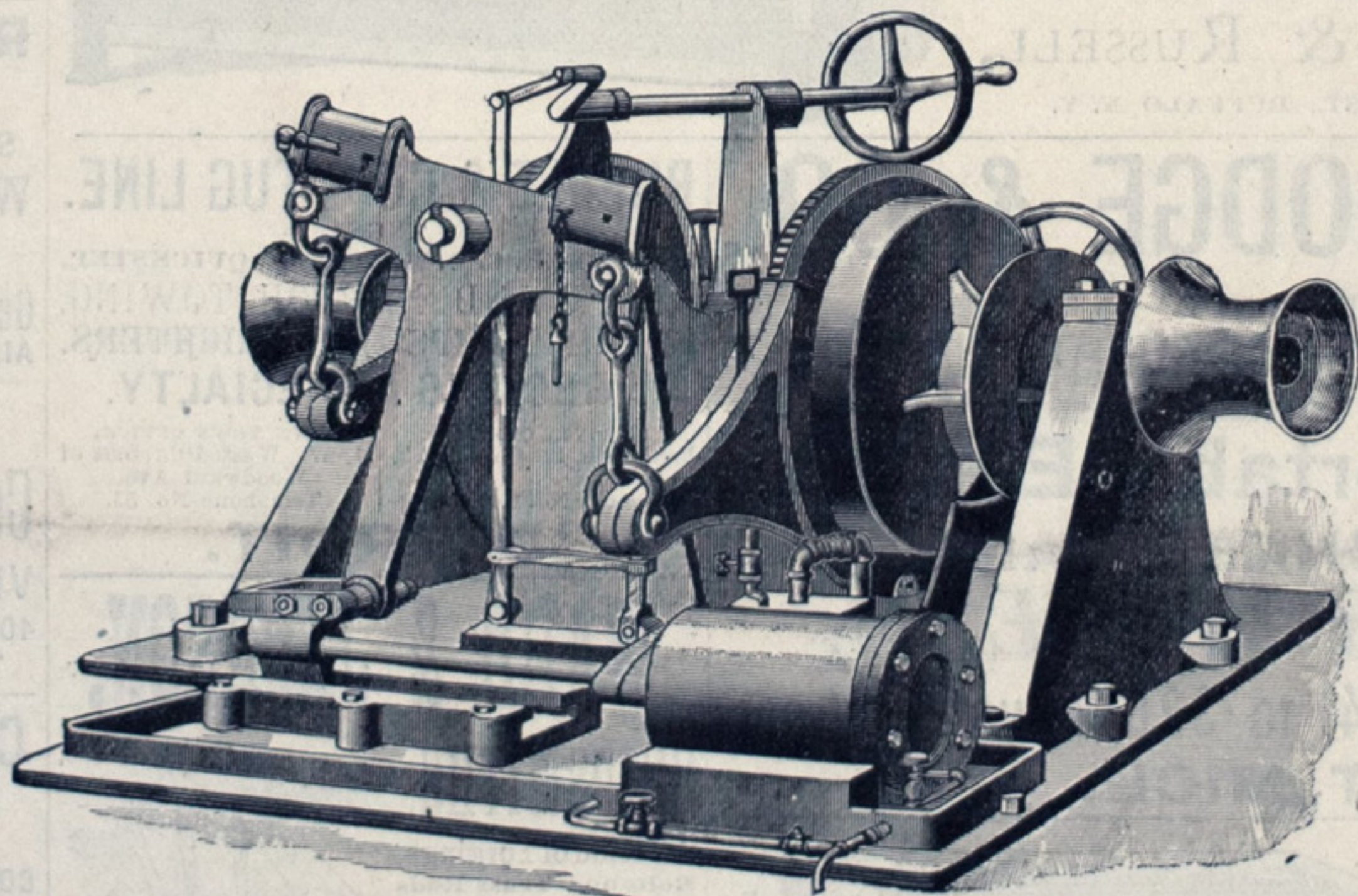
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